

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

**California Independent System     ) Docket No. ER08-\_\_\_\_-000  
Operator Corporation                 )**

**CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION  
GENERATION INTERCONNECTION PROCESS REFORM  
TARIFF AMENDMENT**

**VOLUME 1 OF 4**

**July 28, 2008**

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July 28, 2008

The Honorable Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, DC 20426

**RE: Generator Interconnection Process Reform ("GIPR") Initiative  
Tariff Amendment**

**Docket No. ER08-\_\_\_\_**

Dear Secretary Bose:

Pursuant to Section 205 of the Federal Power Act ("FPA"), 16 U.S.C. § 824d, and Section 35.13 of the regulations of the Federal Energy Regulatory Commission ("Commission"), 18 C.F.R. § 35.13, the California Independent System Operator Corporation ("CAISO") respectfully submits for filing an original and five copies<sup>1</sup> of an amendment ("Amendment") to both the currently effective CAISO Tariff, as well as its Market Redesign and Technology Upgrade ("MRTU") Tariff.<sup>2</sup> This Amendment proposes revisions to the CAISO's generator interconnection process, as embodied in its Large Generator Interconnection Procedures ("LGIP"), Large Generator Interconnection Agreement ("LGIA"), and related tariff provisions.

## **I. EXECUTIVE SUMMARY**

In this Amendment, the CAISO proposes changes to its large generator interconnection process, interconnection agreements and related portions of the CAISO

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<sup>1</sup> Two extra copies of this filing are also enclosed. Please stamp these copies with the date and time filed and return them to the messenger.

<sup>2</sup> Capitalized terms not otherwise defined herein have the meanings set forth in the Master Definitions Supplement, Appendix A to the CAISO Tariff and Appendix A to the MRTU Tariff. Although the Commission has approved the current MRTU Tariff, the CAISO has not yet implemented MRTU and therefore the MRTU Tariff is not yet in effect. The CAISO anticipates that it will implement MRTU in the fall of 2008, though the specific date has not been definitively determined.

Tariff. The CAISO embarked on a comprehensive stakeholder process to remedy the widely-held view that the CAISO interconnection process was not operating efficiently and was in need of modification. Specifically, the CAISO proposes this Amendment to achieve the following objectives:

- Clear the existing backlog of generator interconnection requests;
- Develop procedures and requirements that acceptably balance generation developer flexibility with increased generation developer commitments to promote a greater correlation between system needs and the level of requests for interconnection;
- Provide Interconnection Customers with significant Network Upgrade cost certainty;
- Provide Interconnection Customers with greater certainty in the timing of Interconnection Study outcomes;
- Reduce or eliminate the need for restudies;
- Better integrate the CAISO's Transmission Planning Process with the generation interconnection process; and
- Allow for the integration of state efforts to identify transmission needs for Energy Resource Areas.

As a result of a comprehensive analysis and thorough stakeholder process, the CAISO has developed proposed modifications to the LGIP, LGIA and related tariff provisions, as described herein, in order to achieve these goals.

## II. COMMUNICATIONS

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## III. CONTENTS OF FILING

This filing comprises:

### Volume 1 – Supporting Documents

This Transmittal Letter

Exhibit ISO-1: Testimony of Stephen Ruty  
Exhibit ISO-2: Testimony of Robert Sparks  
Exhibit ISO-3: CAISO Board Memo Regarding GIPR Proposal

### Volume 2 – Clean Tariff Sheets

Attachment A1: Sections 25, Appendices A, U, V, DD, and EE to the Currently Effective CAISO Tariff – Clean Sheets  
Attachment A2: Appendix GG to the Currently Effective CAISO Tariff - Large Generator Interconnection Procedures (LGIP) for Interconnection Requests in a Queue Cluster Window – Clean Sheets  
Attachment A3: Appendix HH to the Currently Effective CAISO Tariff - Large Generator Interconnection Agreement for Interconnection Requests in a Queue Cluster Window – Clean Sheets  
Attachment B1: Sections 24 & 25 and Appendices A, T, U, and V to the 4<sup>th</sup> Replacement MRTU Tariff – Clean Sheets

Attachment B2: Appendix Y to the 4<sup>th</sup> Replacement MRTU Tariff - Large Generator Interconnection Procedures (LGIP) for Interconnection Requests in a Queue Cluster Window – Clean Sheets

Attachment B3: Appendix Z to the 4<sup>th</sup> Replacement MRTU Tariff - Large Generator Interconnection Agreement for Interconnection Requests in a Queue Cluster Window – Clean Sheets

### **Volume 3 – Blackline Tariff Sheets**

Attachment C1: Sections 25, Appendices A, U, V, DD, and EE to the Currently Effective CAISO Tariff – Blacklines

Attachment C2: Appendix GG to the Currently Effective CAISO Tariff - Large Generator Interconnection Procedures (LGIP) for Interconnection Requests in a Queue Cluster Window – Blacklines

Attachment C3: Appendix HH to the Currently Effective CAISO Tariff – Large Generator Interconnection Agreement for Interconnection Requests in a Queue Cluster Window – Blacklines

Attachment D1: Sections 24 & 25 and Appendices A, T, U, and V to the 4<sup>th</sup> Replacement MRTU Tariff – Blacklines

Attachment D2: Appendix Y to the 4<sup>th</sup> Replacement MRTU Tariff - Large Generator Interconnection Procedures (LGIP) for Interconnection Requests in a Queue Cluster Window – Blacklines

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### **Volume 4 – Informational Comparison Documents**

Attachment E1: Comparison of Appendix U and Appendix Y – 4<sup>th</sup> Replacement MRTU Tariff

Attachment E2: Comparison of Appendix V and Appendix Z – 4<sup>th</sup> Replacement MRTU Tariff

## **IV. BACKGROUND**

### **A. Background on the CAISO's Interconnection Policies**

On July 24, 2003, the Commission issued Order No. 2003 to prevent undue discrimination, preserve reliability, and increase competitive energy supply in wholesale electricity markets by facilitating the interconnection of new generation.<sup>3</sup> To accomplish these objectives, Order No. 2003 standardized agreements and procedures for interconnecting generators above 20 MW to electrical transmission systems through standard Large Generator Interconnection Procedures (LGIP) and a standard Large Generator Interconnection Agreement (LGIA). All providers of jurisdictional transmission service were required to demonstrate compliance with Order No. 2003 and its progeny.<sup>4</sup>

In compliance with the Commission's directives, the CAISO made a series of compliance filings in Docket No. ER04-445. The LGIP and LGIA submitted by the CAISO largely conform to the Commission's standard versions, except as approved by the Commission under the "independent entity variation" standard where necessary to (1) specify the roles of the CAISO and the Participating Transmission Owners ("PTOs"); (2) reflect regional differences; and (3) incorporate other variations as deemed appropriate by the CAISO and the PTOs and approved by the Commission. Importantly, the LGIA and LGIP reforms embodied in this Amendment build on, rather than disregard, the CAISO's existing LGIA and LGIP.

### **B. The CAISO's Experience with the Order No. 2003 Paradigm**

The Order No. 2003 interconnection procedures used by the CAISO and other transmission providers across the country have been successful in assuring nondiscriminatory, open transmission access for new generation resources. However, several factors, largely unanticipated at the time of Order No. 2003's adoption, have imposed significant challenges to the efficiency of the present Interconnection Study approach in California and elsewhere. These challenges are also addressed in the testimony of Stephen Ruddy, Exhibit ISO-1 to this filing. In particular, the Order No. 2003 procedures perhaps assumed that interconnection requests would be primarily comprised of large thermal facilities that utilized readily available transmission capacity. These assumptions no longer conform to industry realities in many areas, including California. Rather, changes in the regulatory environment, in fuel price projections, and

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<sup>3</sup> *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, Stats. & Regs. ¶ 31,146, 68, Fed. Reg. 49,846 (August 19, 2003) (2003) ("Order No. 2003").

<sup>4</sup> 106 FERC ¶ 61,220 (2004) ("Order No. 2003-A"); 109 FERC ¶ 61,287 (2004) ("Order No. 2003-B"); 111 FERC ¶ 61,401 (2005) ("Order No. 2003-C").

in the development of larger markets for the sale of the generation output have altered the anticipated number, location, and type of generating units seeking interconnection.<sup>5</sup>

These changes have converged to trigger a proliferation of Interconnection Requests on the CAISO Controlled Grid. The high proportion of requests seeking interconnection of renewable generation in transmission constrained areas compounds the challenges confronting the CAISO that would naturally flow from the surge of Interconnection Requests. In this regard, California is at the forefront of a global challenge to reduce dependence on fossil fuels and greenhouse gas emissions. A central component of the state's multi-faceted effort to achieve these objectives is the adoption of a 20 percent Renewable Portfolio Standard ("RPS"), consideration of increasing the RPS to 33 percent, and adoption of a required reduction of greenhouse gas emissions to 1990 levels by 2020. Generation developers have responded vigorously to the RPS initiative as well as existing state and federal tax incentives for renewable resources. Today, 361 Interconnection Requests totaling more than 105,000 MW are pending in the CAISO interconnection queue. Of these, over 68,000 MW represent renewable resources. These requests far exceed the historic peak demand of 50,270 MW for the CAISO Balancing Authority Area and, notably, surpass any near-term needed capacity from renewable resources to satisfy California's most aggressive RPS goals.

The overall large number of Interconnection Requests and high level of capacity in the CAISO's interconnection queue have overwhelmed available resources and injected unreasonable delays and uncertainty into the Interconnection Study process. The delays and uncertainties arise under the CAISO's current practices because of the general interdependence or incremental nature of each project's serial Interconnection Study. Under the CAISO's current process, a project's system impacts and transmission upgrade requirements build from those identified for projects with a higher priority in the interconnection queue. Thus, when a project higher in the queue drops out, all projects with a lower Queue Position must generally be restudied, which takes time and frequently changes the scope and cost of transmission upgrades assigned to the restudied project. The costs change because the upgrades needed to interconnect the higher queued project are now assigned to the next project in the interconnection queue that triggers the need for the upgrades.

Under such circumstances, and given the "lumpy" nature of transmission investment, a single Interconnection Request is often assigned significant costs for transmission upgrades that will also benefit other lower queued projects. This has created an incentive for Interconnection Customers to withdraw their Interconnection Requests or suspend their expected In-Service Dates. The frequency of restudies

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<sup>5</sup> "Comments of the ISO/RTO Council," *Interconnection Queuing Practices*, FERC Docket No. AD08-2-000 (Jan. 10, 2008)

leads to long processing time for individual Interconnection Requests and to changing, and therefore uncertain, potential cost exposure for project developers.

On April 21, 2008, the CAISO filed a report with the Commission on this matter.<sup>6</sup> In the April 21 report, the CAISO confirmed that its current practice of studying Interconnection Requests serially has resulted in unreasonable and unrealistic studies that do not provide any value to the Interconnection Customers. The report further noted that these deficiencies are exacerbated by the fact that many of the projects proposed in these Interconnection Requests are located in the same geographic area, or have requested interconnection to transmission facilities which are already congested.

For example, the Tehachapi/Big Creek/Path 26 corridor has nearly 10,000 MW of Interconnection Requests, and similarly large clusters of projects are proposed in the East of Lugo corridor (15,300 MW), Devers-Valley area (12,700 MW) and North of Lugo corridor (6,700 MW). This “piling on” effect makes studying Interconnection Requests serially nearly impossible, as it causes Base Cases to be severely voltage constrained to the point of voltage collapse. Multiple requests in a given area also increase the likelihood that withdrawals of higher-queued projects will require potentially endless rounds of restudies of multiple projects behind them in queue. Finally, the CAISO noted that studying Interconnection Requests serially can lead to sub-optimal design for the transmission system because of the lumpy nature of transmission upgrades. The serial approach might suggest a number of smaller upgrades, when what is optimal for the system would be a larger, more comprehensive upgrade.

In the April 21 report, the CAISO further described its positive, but limited, experience with clustering of projects for Interconnection Study purposes under the current LGIP, which arose from developing the plan of service for the Tehachapi Renewable Transmission Project, in conjunction with Southern California Edison Company (“SCE”), the California Public Utilities Commission (“CPUC”), and the California Energy Commission (“CEC”) in 2006. The transmission plan was developed to integrate 19 projects comprising 4,350 MW of wind and other generation in the Tehachapi region. The Tehachapi clustering experience has been unequivocally positive, for both efficiency gains in the study process and improved design for the overall grid. An additional benefit of clustering is that group studies are less impacted by the withdrawal of a single project.

Unfortunately, the CAISO has determined, through a comprehensive analysis of its interconnection practices, that clustering without further interconnection queue reforms will not by itself effectively address the fundamental problem of the unrealistic level of requests and capacity seeking interconnection and the uncertainties associated

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<sup>6</sup> See *Interconnection Queuing Practices*, Docket No. AD08-2-000, filing of the California ISO (Apr. 21, 2008).



with project withdrawals and restudies. Other shortcomings of the existing interconnection process must also be addressed. One shortcoming involves the very low monetary and data requirements imposed on a generation developer to initiate and remain in the interconnection process. The requirements incorporated into the CAISO's existing LGIP and LGIA largely track the Commission's standard documents and create undue incentives for obtaining and maintaining a Queue Position, rather than focusing on the viability of the particular generation project. A second related shortcoming is the ease of, or lack of consequences to, an Interconnection Customer withdrawing its Interconnection Request. The strategic value of Queue Position, coupled with the relatively low cost of commencing and exiting the interconnection process, has materially contributed to the high number of projects entering the CAISO interconnection queue even though the majority of these projects have little likelihood of ever becoming operational. Therefore, the CAISO is proposing a number of modifications to its current interconnection process that addresses the existing shortcomings by imposing greater financial commitments on generation developers, but in return providing generation developers with the benefit of greater efficiency and cost certainty.

### **C. Commission's Process to Address Interconnection Reform**

In response to emerging concerns about the effectiveness of interconnection queue management in RTOs and non-RTO regions, the Commission convened a technical conference in Docket No. AD08-2-000 on December 1, 2007 in Washington, DC. The Commission also issued a notice inviting post-technical conference comments.<sup>7</sup> In a subsequent order on the technical conference, the Commission set out to remedy what it perceived as pervasive delays, noting that "the speakers at the Technical Conference and the written comments confirm that some Transmission Providers are not processing their interconnection queues with the timeliness envisioned in Order No. 2003, in certain cases greatly exceeding the timelines in their tariffs."<sup>8</sup>

The Commission further recognized that increases in the volume of new generation development are creating an equivalent increase in interconnection requests and straining the current Order No. 2003 queue management approach. Additionally, the Commission also recognized the role of renewable resources in putting pressure on the existing interconnection process, stating: "The unprecedented demand in some regions for new types of generation, principally renewable generation, places further stress on queue management because such generation technologies can, for example, be brought online more quickly than traditional generation."<sup>9</sup> The Commission further

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<sup>7</sup> Notice Inviting Comments, *Interconnection Queuing Practices*, Docket Nos. AD08-2-000, *et al.* (Dec. 17, 2007).

<sup>8</sup> See *Interconnection Queuing Practices*, 122 FERC ¶ 61,252 at P 3 (2008) ("March 20 Order").

<sup>9</sup> *Id.*

explained that capacity markets that did not exist when the current queue management approach was developed are adding additional pressure to efficiently interconnect new generation resources.<sup>10</sup> The Commission concluded, “[w]hile [the serial] approach made good sense at the time Order No. 2003 was issued and still works well in many situations, it has led to some unexpected consequences, particularly in transmission systems with numerous interconnection customers and limited excess transmission capacity.”<sup>11</sup>

In the March 20 Order, the Commission opened the door to reforms of the interconnection queue process and invited RTOs to come forward with their specific plans of action. The Commission clarified that it was “open to considering a range of possible variations from Order No. 2003 with regard to future and early-stage existing interconnection requests,” but identified three particular reforms it found to hold the most promise “while remaining faithful to the goals of Order No. 2003”:

First, it may be appropriate to increase the requirements for getting and keeping a queue position. For example, it may be appropriate to increase the amount of the deposits required at the different stages of the process to more accurately reflect the cost of the necessary studies....

Second, elimination of the feasibility study as a separate step could reduce processing time without harming interconnection customers.... Elimination of a separate feasibility study could streamline the study process and could reduce interconnection requests by screening out those customers who are not willing to pay the higher deposit required for a system impact study....

Third, there may be approaches to prioritizing queue processing that provide protection against discrimination comparable to the first-come, first-served approach, but that are more efficient....<sup>12</sup>

Having reached those conclusions after the technical conference, the Commission directed RTOs to file reports with the Commission to detail the efforts they planned to undertake to reform their respective interconnection queues.<sup>13</sup> The Commission also noted that if an RTO or ISO concludes that the Order No. 2003 paradigm is in anyway inadequate to address its queue problems, it may consider proposing variations from Order No. 2003 and such variations will be reviewed under

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10 *Id.*

11 *Id.* at P 15.

12 *Id.* at PP 16-18.

13 *Id.* at P 9.

the “independent entity variation standard.”<sup>14</sup>

#### **D. Summary of CAISO Process to Address Interconnection Challenges**

The CAISO has taken two affirmative steps to effectuate interconnection process reform. First, the CAISO filed with the Commission and the Commission approved a petition for a waiver from certain existing tariff provisions (“Waiver Petition”). Second, the CAISO formulated the GIPR proposal, as presented herein and discussed below in Section V. Together, the Waiver Petition and the GIPR proposal serve to clear out the existing interconnection queue and better manage the queue on a going forward basis.

##### **1. The CAISO’s Waiver Petition**

On May 15, 2008, the CAISO filed the Waiver Petition in Docket No. ER08-960, seeking a one-time waiver of limited provisions of the existing CAISO Tariff governing generator interconnection. The central purpose of the Waiver Petition was to commence the process of clearing the existing backlog of pending Interconnection Requests. The Waiver Petition facilitated this objective in two ways. First, it allowed the CAISO to focus its resources on completing Interconnection Studies and related activities on pending “late stage” and other priority Interconnection Requests, defined in the Waiver Petition as the “Serial Study Group.”<sup>15</sup> Interconnection Requests assigned to the Serial Study Group will continue to be studied serially pursuant to existing LGIP timelines. Second, the Waiver Petition maximized the scope of the application, and therefore effectiveness, of the GIPR proposal by suspending work on other pending Interconnection Requests included them in either the “Transition Cluster” or the “Initial GIPR Cluster.” The Transition Cluster includes all Interconnection Requests pending as of June 2, 2008, which were not assigned to the Serial Study Group. Finally, the Initial GIPR Cluster consists of all Interconnection Requests to be contained in the first going-forward Queue Cluster Window, which commenced on June 2, 2008.

On July 14, 2008, the Commission issued an order granting the CAISO’s waiver request.<sup>16</sup> For purposes of evaluating the merits of this GIPR proposal, the continuing

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<sup>14</sup> *Id.* at P 13.

<sup>15</sup> The Serial Study Group consists of certain “late stage” Interconnection Requests, which the CAISO will continue to study serially and pursuant to existing timelines. The CAISO elected to define late stage Interconnection Requests as those that either: (1) had met specific advanced milestones in the current LGIP Interconnection Study process, (2) had a power purchase agreement approved, or pending approval, by the CPUC or Local Regulatory Authority, or (3) were next in queue order to interconnect to any transmission project that has received land use approvals from any local, state, or federal entity, as applicable, up to the capacity studied by the CAISO. The CAISO explained that these criteria were logical and consistent with the Commission’s guidance in the March 20 Order.

<sup>16</sup> *California Indep. System Operator*, 124 FERC ¶ 61,013 (2008).

relevance of the Waiver Petition is largely limited to its demarcation of the Transition Cluster. As discussed further below, Interconnection Requests in the Transition Cluster are subject to different requirements to remain in the interconnection process. These generally more stringent standards are justified by the need to relieve the existing queue backlog by establishing material, upfront developer commitment.

## **2. Summary of GIPR Stakeholder Process**

The substance of the GIPR proposal will be described in Section V below. The following timeline illustrates the nearly six-month stakeholder process that led to the GIPR proposal:

- January 18, 2008 CAISO posts Issues Identification Paper
- January 25, 2008 Stakeholder Meeting
- January 31, 2008 Stakeholder written comments submitted
  
- February 12, 2008 CAISO posts Draft Proposal
- February 19, 2008 Stakeholder Meeting
- February 26, 2008 Stakeholder written comments submitted
- February 28, 2008 Stakeholder Conference Call
  
- March 12, 2008 CAISO posts Revised Draft Proposal
- March 13, 2008 Stakeholder Conference Call
- March 20, 2008 Stakeholder Conference Call
- March 26, 2008 CAISO Board of Governors Presentation (informational)
- March 27, 2008 Stakeholder Conference Call
  
- April 8, 2008 CAISO announces opening of Queue Cluster Window on June 2, 2008
- April 9, 2008 Stakeholder Conference Call
- April 21, 2008 Status Report Filed with the Commission
  
- May 5, 2008 CAISO posts Revised Draft GIPR Proposal
- May 8, 2008 Stakeholder Conference Call
- May 15, 2008 CAISO files Waiver Petition with the Commission
- May 21, 2008 CAISO posts Revised Draft GIPR proposal
- May 28, 2008 Stakeholder Conference Call
- May 30, 2008 CAISO posts draft GIPR Tariff language revisions
  
- June 2, 2008 Queue Cluster Window opened for Initial GIPR Cluster
- June 6, 2008 Stakeholder written comments submitted
- June 10, 2008 Stakeholder Meeting
- June 17, 2008 Stakeholder GIPR Tariff language written comments received
- June 19, 2008 Stakeholder Conference Call

- June 24-27, 2008 CAISO posts updated GIPR Tariff revisions and Revised Draft GIPR proposal
- July 1, 2008 Stakeholder Meeting re GIPR Tariff language
- July 8, 2008 Stakeholder final GIPR Tariff written comments received
- July 9, 2008 GIPR proposal presented to CAISO Board of Governors, with numerous Stakeholder Comments provided

## **V. DESCRIPTION OF THE GIPR PROPOSAL**

### **A. Structure of the Filing**

Included in this filing are new appendices, for both the current version of the CAISO Tariff as well as the CAISO's MRTU Tariff, incorporating modifications to the CAISO's LGIP and LGIA in order to implement the features of the CAISO's GIPR proposal.<sup>17</sup> These new appendices (referred to herein as the "GIPR LGIP" and "GIPR LGIA") contain the interconnection procedures and agreement terms that will apply to those Interconnection Requests that will be processed under the Transition Cluster (*i.e.*, those already in the interconnection queue that do not meet the criteria for inclusion in the Serial Study Group, and those received before June 2, 2008) and those that are received on or after June 2, 2008 and will therefore be processed under the Initial GIPR Cluster or subsequent clusters. The CAISO is also retaining the current versions of the LGIP and LGIA because the provisions thereof will apply to those Interconnection Requests that will continue to be studied serially as part of the Serial Study Group. The new appendices are identified as Appendices GG (LGIP) and HH (LGIA) for the currently effective version of the CAISO Tariff and Appendices Y (LGIP) and Z (LGIA) for the MRTU Tariff. The CAISO is also proposing minor conforming changes to Section 25 and Appendices A, U, V, DD, and EE of the currently effective tariff and Sections 24 and 25 and Appendices A, T, U, and V of the MRTU Tariff.

In addition, in order to facilitate review of the CAISO's proposed changes to the LGIP and LGIA to implement the interconnection process reform proposal, the CAISO is also including with this filing two attachments that compare the MRTU versions of the current LGIP and LGIA (Appendices U and V) to the new GIPR LGIP and LGIA (Appendices Y and Z) that contain the interconnection process reform changes, as they will exist in the MRTU Tariff.

### **B. Standard of Review**

In the March 20 Order, the Commission stated that all transmission providers should be evaluating whether changes are needed to their queue management practices to ensure that the expediency called for in Order No. 2003 is achieved, and

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<sup>17</sup> Changes to the LGIP also include modifications to the study agreements.

emphasized that such evaluation was particularly important for ISOs and RTOs because the greater level of interest in gaining access to ISO and RTO markets has created a particularly significant backlog in ISO and RTO managed queues.<sup>18</sup> The Commission went on to emphasize that due to the significant differences in the nature and scope of the problem from region to region, it would allow each region the opportunity to develop and propose its own solution that balanced the interests of all stakeholders.<sup>19</sup> The Commission stated that if an RTO or ISO concludes that the options already identified in Order No. 2003 are inadequate to address its queue problems, such entities may consider proposing variations from Order No. 2003, and that because RTOs and ISOs do not own generation and thus do not have an incentive to unduly discriminate, variations sought by an RTO or ISO will be reviewed under the "independent entity variation standard," under which "[a]n RTO or ISO proposing a variation must demonstrate that the variation is just and reasonable and not unduly discriminatory, and would accomplish the purposes of Order No. 2003."<sup>20</sup>

### C. Overview of GIPR Proposal

The CAISO's proposed interconnection process reforms meet the independent entity variation standard because they consist of refinements designed to better achieve the efficiencies called for in Order No. 2003, while still providing a uniform, non-discriminatory process for accessing the CAISO Controlled Grid. Although specific modifications are discussed in greater detail below, the following is a summary of the significant improvements contained in the CAISO's GIPR proposal:

- **Adopts a More Efficient Two-Step Group Study Approach.** The GIPR replaces the CAISO's current serial Interconnection Study approach with a more efficient two-step "Group Study" or "Clustering" approach for pending and future Interconnection Requests. The CAISO will perform two Interconnection Studies - the Phase I Interconnection Study and Phase II Interconnection Study - rather than the current three studies. The Phase I and Phase II studies capture the functions of the existing Order No. 2003 Interconnection Studies, except that Interconnection Customers under the GIPR will rely on the release of updated Interconnection Base Case Data, rather than a formal Feasibility Study, to perform preliminary assessments. The Phase I and Phase II studies will be done individually or for groups of projects received during one of two Queue Cluster Windows opened each year, depending on how the projects in a particular cluster electrically relate to one another. By utilizing Group Studies, the CAISO and PTOs can more expeditiously evaluate the large volume of existing

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<sup>18</sup> March 20 Order at P 4.

<sup>19</sup> *Id.* at P 8.

<sup>20</sup> *Id.* at P 13.

Interconnection Requests to clear the current backlog and assess future Interconnection Requests.

- **Includes Accelerated Study Opportunities to Ensure Timely Commercial Operation.** The GIPR includes an accelerated study process for those Interconnection Customers able to demonstrate that the GIPR timelines cannot accommodate the desired online date for their projects and for which the CAISO determines that Group Studies are not required.
- **Imposes Greater Developer Commitment to Reduce the Number of Pending and Future Interconnection Requests.** The GIPR seeks to reduce the backlog and encourage Interconnection Requests that more closely resemble system needs by increasing the level of developer financial commitment to participate in the interconnection process. The CAISO's proposal requires greater upfront payments from project developers to initiate the interconnection process and creates additional financial exposure for withdrawal of the project from the process prior to the new Generating Facility becoming operational. It also builds in measures aimed at avoiding dampening legitimate generation development that could result from increasing the financial commitment of Interconnection Customers without accounting for the inherent and inevitable uncertainty of generation development. By introducing more stringent financial security requirements and making that security non-refundable as the interconnection process goes forward, the GIPR eliminates the current incentive to avoid Network Upgrade cost liability through suspending construction.
- **Facilitates Investment by Providing Process and Cost Certainty.** The GIPR corrects inefficiencies in the serial study process by providing developers with greater certainty with respect to Interconnection Study timelines and their ultimate responsibility to finance needed transmission upgrades. Unlike the current approach, where cost responsibility may change, even after the execution of an interconnection agreement, depending on decisions made by other Interconnection Customers, generation developers will be assigned a maximum cost for Network Upgrades that will not vary whether or not other projects withdraw.
- **Promoting Greater Efficiency in Transmission Planning.** Under the current interconnection process, transmission upgrades needed for interconnection are identified, in large part, independently from transmission upgrades developed through the CAISO's annual Transmission Planning Process. The GIPR enhances coordination between the CAISO's Transmission Planning Process and interconnection needs.

#### **D. Modifications to CAISO LGIP to Implement GIPR Process**

This section outlines the modifications the CAISO is proposing to its LGIP to implement the GIPR. In addition, the attached testimony of Stephen Ruddy and Robert Sparks provide additional insight into these changes and explains certain policy decisions made by the CAISO and its stakeholders.

##### **1. Queue Cluster Windows.**

Consistent with the Commission's guidance and consensus of CAISO stakeholders, the GIPR proposal departs from the CAISO's prior serial project-by-project study approach and transitions to utilization of the Clustering authority included in Order No. 2003. The CAISO will generally use a Clustering approach to study Interconnection Requests.<sup>21</sup> The CAISO will open two "Queue Cluster Windows" each year, during which the CAISO will accept Interconnection Requests.<sup>22</sup> Although each Interconnection Request will receive a "queue position" for tracking purposes, Queue Position no longer has any significance under the GIPR. In other words, for study purposes, all Interconnection Requests received during a particular Queue Cluster Window will effectively have the same position in the CAISO's interconnection queue.

Each Queue Cluster Window will be four months in duration. The CAISO considered but rejected the idea of using two six-month Queue Cluster Windows each year in order to permit more efficient processing of Interconnection Requests given the general stakeholder consensus to limit, to the maximum extent possible, the duration of the study periods. The CAISO believes that reserving two two-month periods each year during which the CAISO will not accept Interconnection Requests will not prejudice any potential Interconnection Customer. The duration of the first Queue Cluster Window, which, as noted above, opened on June 2, 2008 and will continue until July 31, 2009, is a one-time anomaly to account for the need to clear the existing backlog of Interconnection Requests by first processing the Serial Study Group and then the Transition Cluster. For 2009, an additional Queue Cluster Window will open on October 1 and close on January 31. Thereafter, during each calendar year the first Queue Cluster Window will open on April 1 and close on July 31 and the second Queue Cluster Window will open on October 31 and close on January 31 of the subsequent year.<sup>23</sup>

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<sup>21</sup> New Section 3.3 of the GIPR LGIP describes the Queue Cluster Windows and provides the dates for each window.

<sup>22</sup> When possible, the CAISO has retained the nomenclature from Order No. 2003. Accordingly, the CAISO continues to use the term Queue Cluster Window to represent the period during which all received Interconnection Requests may be considered jointly. The CAISO notes, however, that with the elimination of any relevance to Queue Position under the GIPR a more accurate term might be "Cluster Window."

<sup>23</sup> Several stakeholders have raised concerns with this timeline because, as a result, the identification by the Phase I Interconnection Study of preliminary Network Upgrades for projects in the Initial GIPR Cluster will take place around April 2010. Similarly, based on the general timelines, final



The CAISO's decision to move to a Clustering approach for processing Interconnection Requests is just and reasonable because it is a critical step in addressing systemic queue delays. As noted above, the CAISO decided with its stakeholders that true interconnection reform could likely not be accomplished without refining and adopting some variant of a Clustering approach. Clustering will allow the CAISO and PTOs to better allocate their interconnection resources and will provide developers with greater certainty regarding milestones and costs. In addition, as the CAISO noted in Docket No. AD08-2, the CAISO's experience with clustering to date has been positive and is consistent with the Commission's recommendations that RTOs consider clustering as an alternative to the Order No. 2003 serial approach.

## **2. Enhanced Interconnection Request Requirements**

An underlying premise of the GIPR is that the willingness of a developer to commit significant resources to a particular project is a strong indication that the project is commercially viable. Consistent with this premise, the GIPR implements more stringent criteria for what is considered a complete Interconnection Request. Generally, a completed Interconnection Request under the GIPR will require all of the information currently required by the CAISO LGIP process with the following additions and clarifications:

Enhanced Technical Details: The Interconnection Customer must identify the proposed project's physical site location(s) by providing detailed maps and the project's proposed service interconnection point (location where Interconnection Customer's Interconnection Facilities meet the Generating Facility). Each Interconnection Customer must submit all required technical data with its Interconnection Request to allow for the efficient commencement and performance of the Phase I Interconnection Study. Accordingly, wind developers will no longer be allowed to submit their detailed electrical design specifications and other technical data requirements six months after submission of the Interconnection Request as is now permitted under FERC Order No. 661-A. No stakeholder opposed this change from the existing LGIP. The Interconnection Customer would identify the project's preferred Point of Interconnection and preferred voltage level. The Interconnection Customer would only identify a single Point of Interconnection in the Interconnection Request; however, alternate and more cost

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Network Upgrades and Interconnection Facilities for these projects through the Phase II Interconnection Study may not be identified until well into 2011, which these stakeholders contend is too late. Although the CAISO's proposed timeline is designed to most efficiently clear the existing backlog of requests while at the same time implementing the GIPR reforms as soon as possible, the CAISO appreciates this concern, and, depending on the number of Interconnection Requests contained in the Initial GIPR Cluster, may be able to include the process of identifying final Network Upgrades for the Initial GIPR Cluster in its 2010 Transmission Planning Process. The CAISO will continue to explore this issue with stakeholders. Moreover, the CAISO notes that with over 100,000 MW of capacity in the Serial Study Group and Transition Cluster, much of the CAISO Balancing Authority Area's near-term capacity needs are likely to be met, thereby mitigating any impact of the proposed processing timelines.

effective Points of Interconnection may be identified by the CAISO and PTO during the Scoping Meeting or during the Phase I studies, and these options would be presented to the Interconnection Customer for its consideration.

Commercial Operation Date: The Interconnection Customer must propose a Commercial Operation Date when the entire output of the proposed Generating Facility can be in service. However, Interconnection Customers may also indicate any “phasing” of the Commercial Operation Date of any particular Generating Units comprising the Generating Facility to facilitate operational studies or the development of tiered Network Upgrades. There are subsequent opportunities to adjust this date: (i) within five days of the Scoping Meeting, (ii) prior to the Phase II Interconnection Study, and (iii) at the meeting to discuss Phase II study results. Given that the Phase II Interconnection Study identifies Network Upgrades in coordination with the Transmission Planning Process, needs other than simply connecting the proposed generation may be considered, which may lead to a transmission addition different in size and scope than that simply necessary to interconnect the proposed Generating Facility. To the extent this may affect the Interconnection Customer’s requested Commercial Operation Date, the CAISO will use best efforts, through the performance of Phase II Interconnection Study operational assessments, to continue to accommodate the Commercial Operation Date even pending completion of Network Upgrades. The final Commercial Operation Date will be included in the LGIA.

As under the existing LGIP, the Interconnection Customer will be allowed to delay the Commercial Operation Date for its project for any reason up to a maximum of three years and not have it be deemed a Material Modification leading to withdrawal and forfeiture of its Interconnection Financial Security. However, the Interconnection Financial Security may be converted to cash when facility construction starts as described below. Nor does delay or suspension of the Commercial Operation Date otherwise defer the accrual of the tiered commitments related to the Interconnection Financial Security. Therefore, delay or suspension of the Commercial Operation Date under the GIPR does not materially alter the financial exposure of the Interconnection Customer, but can delay or prevent conversion of the Interconnection Financial Security that would otherwise occur if deemed a withdrawal.

Under the GIPR, the Commercial Operation Date is for most purposes the date of Commercial Operation of the entire capacity of the Generating Facility as specified in the LGIA. Thus, a Generating Facility using a technology that allows for phased construction, *i.e.*, wind or solar, can be developed incrementally, including within the three year suspension period, but any remaining Interconnection Financial Security will not be released until the Commercial Operation Date of the entire Generating Facility.

Site Exclusivity: The Interconnection Customer must demonstrate proof of Site Exclusivity through the project’s proposed Commercial Operation Date or post a \$250,000 Site Exclusivity Deposit in lieu of Site Exclusivity. This provision simply accelerates the requirement currently included in Section 11.3 of the current LGIP to

provide a \$250,000 deposit if Site Control cannot be demonstrated at the time of execution of the LGIA.<sup>24</sup> However, unlike the deposit in current LGIP Section 11.3, which is non-refundable and goes toward offsetting costs of transmission upgrade construction, the Site Exclusivity Deposit under GIPR LGIP Section 3.5.1.4 is refundable upon withdrawal or proof of Site Exclusivity. Under the GIPR, the Interconnection Financial Security operates to demonstrate commitment toward payment of construction costs.

The CAISO is proposing to define "Site Exclusivity" differently from the definition of "Site Control" in part specifically to address concerns raised by the federal Bureau of Land Management ("BLM") about site control for generators on federal land. After consultation with BLM, the "Site Exclusivity" definition accommodates BLM's concerns. It does so by granting BLM the authority to determine what will constitute sufficient proof of Site Exclusivity on land under its jurisdiction and requiring that, absent a showing of an alternative approved by BLM, a final use permit be demonstrated.

Interconnection Study Deposit: Under the GIPR, the CAISO raises the required deposit that each Interconnection Customer must post in advance to cover the cost of Interconnection Studies to \$250,000. This Interconnection Study Deposit will cover costs of processing the Interconnection Request and conducting both the Phase I and Phase II studies. This deposit becomes non-refundable over time in accordance with the following schedule:

- \$100,000 of the Interconnection Study Deposit becomes non-refundable 30 days after the Scoping Meeting. Thus, an Interconnection Customer may withdraw its project prior to completion of the Base Cases and receive full recovery of its study deposit amount, net of administrative and study costs to date.<sup>25</sup>

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<sup>24</sup> Under the current LGIP, the term used is "Site Control." Because the current LGIP will continue to be effective for Serial Study Group Interconnection Requests even after the effective date of the GIPR LGIP, the GIPR LGIP uses the term "Site Exclusivity."

<sup>25</sup> Interconnection Customers may assert that 30 days after the Scoping Meeting is a short time in which to determine whether to withdraw and still receive a full refund of their study deposits, particularly without complete Interconnection Base Case Data. However, the CAISO considers this timing important because, in order to build the Base Case and publish accurate Interconnection Base Case Data, the CAISO must know which Interconnection Requests will proceed. Once the Base Case is developed, changes in the studied projects may impact the timing of producing study results. Accordingly, the CAISO elected to create an incentive for Interconnection Customers to decide whether to proceed at an early stage, i.e., prior to commencement of the Phase I Interconnection Study. Moreover, during the Scoping Meeting, the Interconnection Customer will be provided information regarding the amount of generation from Generating Facilities in the Queue Cluster Window that propose to interconnect near the Interconnection Customer's project and will also have the benefit of discussions with CAISO and PTO engineers of a qualitative assessment of the anticipated impacts of its project on the transmission system. The CAISO considers that information sufficient for an Interconnection Customer to make a reasonably informed decision whether to

- If the Interconnection Customer withdraws within 30 days following the Phase I Interconnect Study Results Meeting, the Interconnection Customer receives a refund of the unused balance of its deposit (net of administrative and study costs) above \$100,000, if any.
- The full amount of the study deposit becomes non-refundable 30 days after the Phase I Interconnection Study Results Meeting. However, if the Interconnection Customer executes an LGIA, it will be entitled to a refund of the amount of the deposit not needed to cover administrative and study costs of processing the Interconnection Request. If the actual study and administrative costs exceed the original study deposit, the Interconnection Customer will be required to pay the difference.

These amounts are lower for small generators. Specifically, Interconnection Requests involving projects less than 20 MW that do not otherwise qualify for the Small Generator Interconnection Procedures because either: (1) they request the CAISO to perform a Deliverability Assessment; or (2) they involve incremental increase in capacity to an existing commercially operational generation plant with aggregate capacity greater than 20 MW; will only be required to make a \$100,000 study deposit. If the Interconnection Customer withdraws within 30 days following the Phase I study Results Meeting, the Interconnection Customer receives a refund of the unused balance of its deposit (net of administrative and study costs) above \$50,000. The full amount of the study deposit becomes non-refundable 30 days after the Phase I study Results Meeting. However, the full \$100,000 is refundable net of administrative and study costs following the Phase II studies if an LGIA is executed. If the actual study and administrative costs exceed the original study deposit, the Interconnection Customer will be required to pay the difference.

The amount and application of the Interconnection Study Deposit ensures that Interconnection Customers that submit Interconnection Requests are sufficiently capitalized that they represent a relatively low risk of dropping out of the process and delaying other Interconnection Requests, while not unduly discriminating against those seeking access to the CAISO Controlled Grid. As a result of its analysis as to how best to achieve this goal, the CAISO determined that a \$250,000 deposit struck the appropriate balance. It represents a modest increase over the aggregate deposit amount of \$170,000 for performing the three Interconnection Studies under the current LGIP. The increase is similarly consistent with the Commission's finding in the March 20 Order that increased study deposits might be appropriate in some circumstances,<sup>26</sup>

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withdraw or to proceed with its Interconnection Request during that 30-day period after the Scoping Meeting.

and, indeed, other transmission providers have proposed similar measures.<sup>27</sup> Finally, the CAISO considered having graduated study deposit requirements based on the size of the proposed facility. However, a review of the CAISO's existing queue revealed no correlation between the size of the project and study costs expended or even between the size of the project and the market capitalization of the Interconnection Customer or project sponsor. Accordingly, adopting graduated study costs was viewed as unnecessary, adding undue complexity, and creating at least the specter of unintended and unforeseen perverse market behavior.

As noted, the structure of returning portions of the Interconnection Study Deposit under certain pre-defined circumstances provides a financial incentive for the project developer to evaluate rigorously the viability of a project so as to withdraw a project expeditiously if the project will not move forward. This will enhance the dependability and quality of Interconnection Studies and greatly mitigate the current problem of cancelled projects during and following the study process.

Delivery Status: The Interconnection Customer must specify its requested deliverability status, either full capacity or Energy only. The Deliverability Assessment will be performed at peak conditions in accordance with the CAISO deliverability analysis developed to implement the state's resource adequacy requirements. Full capacity in this instance refers to the maximum Qualifying Capacity of a particular resource technology type under counting protocols adopted by the California Public Utilities Commission or Local Regulatory Authorities. However, it should be noted that for wind resources the entire range of historic output used in the counting protocols should be considered in the deliverability studies. Thus, if the output of a wind resource ranges from 1 MW to 100 MW during the period evaluated for determining Qualifying Capacity, the resource will be studied at the 100 MW level, even though the resource's Qualifying Capacity may be a fraction of that amount.

The CAISO's proposal to put in place more stringent application requirements for Interconnection Requests is just and reasonable because it will ensure that only commercially viable generators request interconnection and that the lack of technical information does not continue to delay the processing of Interconnections Requests. In general, the CAISO has noted that the lack of technical data has been a cause for delays in the serial study process and likewise will delay completion of individual and Group Studies under a Clustering approach.

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<sup>27</sup> See *Midwest Indep. System Operator*, Docket No. ER08-1169, filing of the Midwest ISO (June 26, 2008).

### **3. Interconnection Request Validation and Execution of Generation Interconnection Process Agreement**

Much like under the CAISO's existing interconnection procedures, all Interconnection Requests under the GIPR LGIP must be validated soon after submittal. However, certain changes to Section 3.5.3 of the current LGIP (renumbered as Section 3.5.2.2 in the GIPR LGIP) were required to account for the fact that the close of the Queue Cluster Window is the new trigger for deadlines to ensure Interconnection Requests are complete. In general, Section 3.5.2.2 requires that all necessary information must be submitted within 20 days of the close of the Queue Cluster Window or within 10 days of the notification by the CAISO of a deficiency. Any Interconnection Requests not validated within the allowable timeframe will be deemed withdrawn and deposit amounts net of any administrative costs will be refunded. Once the Interconnection Request is validated, the CAISO will furnish the Interconnection Customer with a Large Generator Interconnection Study Process Agreement. As discussed herein, the CAISO has combined the multiple study agreements in to one master study agreement under the GIPR proposal.

The GIPR's process of validating Interconnection Requests is consistent with the CAISO's existing tariff provisions. The decision to consolidate the previous three study agreements into one agreement is discussed in Section V.F below.

Significantly, the use of Group Studies to evaluate interconnection needs and allocate costs among those Interconnection Requests assigned to the particular group requires that any dispute regarding which projects should be included in the Group Study be resolved on an expeditious basis. Therefore, the CAISO has referenced in GIPR LGIP Section 3.5.2.2 an expedited dispute resolution process under GIPR LGIP Section 13.5. Under GIPR LGIP Section 13.5, the CAISO will use an LGIP Executive Dispute Committee, consisting of the CAISO's vice-president responsible for administration of the LGIP, the CAISO's vice-president responsible for customer affairs, and an additional CAISO vice-president, to determine within five Business Days whether to restore any Interconnection Request deemed invalid and withdrawn. If the Interconnection Customer continues to dispute the decision of the LGIP Executive Dispute Committee, then the Interconnection Customer may seek relief under the CAISO's general alternative dispute resolution procedures found in Section 13 of the CAISO Tariff.

### **4. Scoping Meetings**

Consistent with the current tariff, the CAISO will conduct a Scoping Meeting with each Interconnection Customer within 60 days after the close of the Queue Cluster Window.<sup>28</sup> The purpose of the Scoping Meeting will be to discuss reasonable

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<sup>28</sup> Previous Appendix U Section 3.5.4 has been renumbered as Section 5 under the GIPR LGIP.

Commercial Operation Dates and alternative interconnection options, to exchange information including any transmission data that would reasonably be expected to impact such interconnection options, to analyze such information and to determine the potential feasible Points of Interconnection and eliminate alternatives given resources and available information. The CAISO will prepare minutes from the meeting, verified by the Interconnection Customer and the other attendees, that will include, at a minimum, discussions among the applicable PTO(s) and the CAISO of the expected results and a good faith estimate of the costs for the Phase I Interconnection Study.<sup>29</sup>

These modifications to this section of the LGIP were driven by the need to ensure that the purposes of the Scoping Meeting are appropriate and conducive to the GIPR Clustering approach to studying Interconnection Requests, and that all parties to the meeting understand these purposes.

### **5. Project Grouping / Base Case Development**

After the Scoping Meetings, the CAISO and PTO develop Base Cases for studies. The CAISO and PTO will study projects in each Queue Cluster Window either individually, or as part of a Group Study, for those Interconnection Requests electrically affecting one another with respect to the analysis being performed. Final grouping for Delivery Network Upgrade cost allocation purposes will be determined during the studies using generation distributions factors. Different Base Cases will be developed in order to focus on a stressed dispatch level for each group, and at the same time balance loads and resources. The CAISO will make available to Interconnection Customers and Market Participants relevant Base Cases, in accordance with the disclosure requirements for Interconnection Base Case Data. Accordingly, the procedures applicable to access the relevant Base Cases will depend on factors such as whether the requestor is a Market Participant, WECC member, and can satisfy requirements for Critical Energy Infrastructure Information (CEII) access.

### **6. Phase I Interconnection Study and Cost Caps**

When the CAISO and PTOs have completed the Scoping Meetings, grouped the projects, and assembled Base Cases, the CAISO and PTO will conduct the first of two Interconnection Studies, called the "Phase I Interconnection Study." The CAISO will use Reasonable Efforts to complete and publish to Interconnection Customers the Phase I Interconnection Study report within 270 calendar days after the close of the

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<sup>29</sup> GIPR LGIP Section 5 requires the Interconnection Customer bring to the Scoping Meeting, *inter alia*, any system studies previously performed. Several stakeholders asserted that the requirement should be stated as reciprocal to the CAISO and PTOs. However, the obligation already is effectively reciprocal. The provisions of both the current LGIP and the GIPR LGIP specify that the CAISO and PTOs must bring to the Scoping Meeting "already available technical data" relating to a myriad of reliability issues as "reasonably necessary to accomplish" the purpose of the Scoping Meeting.

Queue Cluster Window and 180 calendar days after the final Scoping Meeting held for the Interconnection Study Cycle.

The Phase I Interconnection Study is intended to perform the following functions:

- evaluate the impact of all Interconnection Requests received during the Queue Cluster Window on the CAISO Controlled Grid;
- preliminarily identify all Network Upgrades needed to address the impacts on the CAISO Controlled Grid of the Interconnection Requests;
- preliminarily identify for each Interconnection Request required Interconnection Facilities;
- assess the Point of Interconnection selected by each Interconnection Customer and potential alternatives to evaluate potential efficiencies in overall transmission upgrades costs;
- establish the maximum cost responsibility for Network Upgrades assigned to each Interconnection Request; and
- provide a good faith estimate of the cost of Interconnection Facilities for each Interconnection Request.

The Phase I Interconnection Study will include an On-Peak Deliverability Assessment evaluating summer peak conditions and a short circuit study. The On-Peak Deliverability Assessment will identify thermal overloads at summer peak conditions to be mitigated. The CAISO and PTO will identify Delivery Network Upgrades in performing the Deliverability Assessment needed to ensure the deliverability status requested. The Deliverability Assessment study process will continue to involve a coordinated effort between the CAISO and PTOs to build the cluster Base Cases, with the CAISO directing the process. The CAISO and PTO will identify Reliability Network Upgrades in performing short circuit and stability studies. Stability studies will only be conducted if the CAISO and PTO have a reason to expect transient or voltage stability problems. The analysis will also include an Off-Peak Deliverability Assessment to evaluate Network Upgrades that may be needed to efficiently allow delivery of Energy from resources, such as wind, that have off-peak production profiles.

On an annual basis, prior to the commencement of the April 1 Queue Cluster Window, each PTO under the direction of the CAISO will publish per unit costs for facilities generally required to interconnect Generation to its system. These per unit costs will reflect the anticipated cost of procuring such facilities. These per unit costs will be used to develop the cost of Reliability Network Upgrades, Delivery Network Upgrades and Participating TO's Interconnection Facilities under Section 6 of the GIPR LGIP.

The Phase I Interconnection Study essentially collapses the prior Interconnection Feasibility Study and Interconnection System Impact Study into a single study. Some stakeholders have challenged the wisdom of such a change. They have argued that the



Interconnection Feasibility Study remained necessary as a relatively low-risk means of assessing the viability of a project and as a means of providing load-serving entities with transmission information to support competitive solicitations. Nevertheless, consistent with the Commission's March 20 Order, the CAISO has opted to eliminate the Interconnection Feasibility Study and compensate for its absence by increasing the amount of transmission information and technical data available to prospective project developers. Thus, instead of the CAISO performing the preliminary feasibility assessment for the interconnection, the CAISO will be providing information to Market Participants and project developers for them to evaluate their own projects or those submitted as part of a solicitation process.

In this regard, the CAISO believes this approach of allowing others to assume greater responsibility for preliminary assessments is also consistent with the direction of the Commission in Docket No. RM07-01-000. The Notice of Proposed Rulemaking in that docket proposes to allow transmission planning and procurement personnel of a utility to exchange information for planning purposes. This would permit the transmission planning side of a jurisdictional utility to perform studies on behalf of the procurement side of the utility to facilitate evaluation of requests for offers or other solicitations. Moreover, the CAISO has developed the Phase I Interconnection Study and the use of the Interconnection Study Deposit in a way that should also allow load-serving entities some flexibility in structuring solicitations. For instance, Phase I Interconnection Studies will provide estimates of both Interconnection Facilities and Network Upgrades needed to interconnect all generators in a particular Queue Cluster Window. That information can be used to short list or select winners from the solicitation, and an Interconnection Customer not selected in a solicitation can withdraw and mitigate its Interconnection Study Deposit exposure. As such, the CAISO believes that the elimination of the Interconnection Feasibility Study in favor of the Phase I Interconnection Study is just and reasonable. However, the CAISO is committed to continuing to refine its processes to better align with solicitation processes should experience dictate the need for greater coordination.

Cost Allocation for Reliability Network Upgrades. Under the GIPR, the estimated costs of Reliability Network Upgrades identified as a result of an Interconnection Request studied separately will be assigned solely to that Interconnection Request. The estimated costs of Reliability Network Upgrades identified through a Group Study will be assigned to all Interconnection Requests in that Group Study pro rata on the basis of the maximum megawatt electrical output of each proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed by the Interconnection Customer in its Interconnection Request.

Cost Allocation for Delivery Network Upgrades. Under the GIPR, the estimated costs of Delivery Network Upgrades identified in the On-Peak or Off-Peak Deliverability Assessment will be assigned to all Interconnection Requests selecting Full Capacity Deliverability Status based on the flow impact of each such Large Generating Facility on

the Delivery Network Upgrades as determined by the Generation distribution factor methodology set forth in the Deliverability Assessment methodology.

Binding Cost Estimate for Network Upgrades. An important change in cost allocation policy under the GIPR is that the estimates of each Interconnection Customer's cost responsibility for Network Upgrades (both Reliability Network Upgrades and Delivery Network Upgrades) determined in the Phase I Interconnection Study will serve as the maximum cost responsibility for Network Upgrades assigned to each Interconnection Request. In other words, unlike the current approach, where cost responsibility may change due to decisions made by other Interconnection Customers, generation developers will be assigned a maximum Network Upgrade cost assignment that will not vary whether or not other projects withdraw. Even if the Phase I Interconnection Study estimate of Network Upgrades increases as a result of the Phase II Interconnection Study outcomes, the Interconnection Customer will not bear that additional cost. Rather, under the GIPR, the PTOs assume the cost responsibility for all Network Upgrade costs that exceed that collected from Interconnection Customers as Interconnection Financial Security.

This policy was part of the fundamental balance struck in addressing the cost uncertainty that has resulted from restudies under the current serial study approach. Because the CAISO is increasing the required financial commitments and consequences throughout the interconnection process in an effort to realize more realistic outcomes that match system needs, the GIPR, in exchange, establishes a "cap" on the Interconnection Customer's liability for Network Upgrades. The policy also rests on the fact that in the CAISO Balancing Authority Area, load customers reimburse PTOs for the cost of all Network Upgrades, even those needed solely to accommodate an Interconnection Request. The risk that load customers will have to bear the cost burden of underutilized transmission assets is mitigated by both the increased upfront financial commitments imposed on Interconnection Customers and the process of coordinating the identification of Network Upgrades with other transmission requirements evaluated through the Transmission Planning Process. The CAISO believes this approach strikes an equitable balance to provide Interconnection Customers with valuable certainty in exchange for the increased financial commitments required to keep only viable projects in the study process.

There is an important distinction between the maximum cost responsibility established by the Phase I Interconnection Study and the actual financing obligation determined through the Phase II Interconnection Study. Since the actual transmission facilities needed to accommodate any particular Interconnection Request are determined by the Phase II Interconnection Study, the CAISO performs a second allocation process using the same methodology as that under the Phase I Interconnection Study. This process will assign financing responsibility, which will be satisfied by drawing down or billing against the Interconnection Customer's Interconnection Financial Security. In no case, however, will the cost responsibility exceed that determined in the Phase I Interconnection Study.

## **7. Results Meeting and Posting of Security.**

Within 30 days following completion of the Phase I Interconnection Studies, the CAISO meets with each Interconnection Customer to discuss the Phase I study report and the Interconnection Customer's total cost responsibilities for Network Upgrades at its requested deliverability status and an estimate of Interconnection Facilities costs. The costs for Network Upgrades are binding and therefore constitute essential information for Interconnection Customers to determine interest to proceed to the Phase II Interconnection Study or withdraw.

Under current interconnection rules, an Interconnection Customer is not required to provide financing for Network Upgrades associated with its project until construction of those facilities begins in accordance with a schedule set forth in the LGIA. The GIPR changes the current rules by requiring the Interconnection Customer to post Interconnection Financial Security in an initial amount equal to 20 percent of the total cost responsibility for Network Upgrades and Interconnection Facilities determined by the Phase I Interconnection Study. The remaining 80 percent of the estimated costs must be posted within six months following the conclusion of the Phase II Interconnection Study.

Surrender of Security. Over time, a portion of the posted Interconnection Financial Security becomes non-refundable. The fundamental tenet of this reform is that the financial commitment of the generator increases as time goes on, creating an incentive to withdraw from the interconnection process at the earliest moment that the developer decides not to continue with the project. This will help mitigate the impact of withdrawals on the study process.

To make sure that any surrender of the Interconnection Financial Security is equitable, the GIPR puts in place a detailed system that increases the ability of the Interconnection Customer to recover a portion of the security if a withdrawal is precipitated by any of several reasons, detailed in Section 9.4.1 of the GIPR LGIP. Those reasons are:

- The Interconnection Customer after a good faith effort fails to secure a power purchase agreement. At the time of withdrawal, the Interconnection Customer must provide the CAISO with evidence of unsuccessful participation in a competitive solicitation or bilateral negotiation with a non-affiliate;
  - The Interconnection Customer is denied one or more necessary permits (e.g., air, water, real property, environmental, etc.) required to construct and operate its proposed Generating Facility;
  - The estimated cost of PTO's Interconnection Facilities identified in the Phase II studies increased by 30 percent or \$300,000, whichever is greater, over the amount identified in the Phase I Interconnection Study;
- or

- There is a change in the Interconnection Customer's Interconnection Facilities based on a CAISO-mandated change in the Point of Interconnection.

If an Interconnection Customer withdraws for any reasons other than these four, security posted to date will be surrendered. If a customer withdraws pursuant to one of these four reasons, it may recover a portion of the unused security. The recoverable portion of the security will decrease over time. The timetable is described in detail in Section 9.4.2 of the GIPR LGIP. However, a few salient elements regarding the treatment of the Interconnection Financial Security are:

- Upon the initial posting the Interconnection Financial Security in the amount of 20 percent of the assigned Network Upgrade costs, 50 percent (or 10 percent of the total) or \$500,000, whichever is greater, becomes at risk of surrender regardless of the reason for the withdrawal. (GIPR LGIP Section 9.4.2.)
- Except for actual costs incurred, any posted Interconnection Financial Security for PTO's Interconnection Facilities is recoverable by the Interconnection Customer upon withdrawal regardless of the reason. (GIPR LGIP Section 9.4.)
- Special accommodation has been made to protect Interconnection Customers that are denied a necessary permit that occurs after the second posting of 100 percent of the Interconnection Financial Security. Where the reason for the withdrawal is based on the failure to obtain necessary governmental permits, the exposure is capped in a manner similar to that applicable to the initial posting of 20 percent of the estimated Network Upgrade costs. This provision was included in response to stakeholder input to acknowledge that circumstances beyond the developer's control may extinguish the viability of a project at a relatively late date in the development process.
- Increased financial exposure is triggered by the commencement of Construction Activities. However, Construction Activities have been defined in a manner that attempts to ensure that they represent meaningful financial commitments by the constructing PTO.

As noted, this structure balances the goal of increasing the financial commitment of developers to encourage realistic participation in the interconnection process with the inherent uncertainties of project development. The staggered security posting requirement was incorporated into the GIPR by stakeholders to facilitate the ability of Interconnection Customers to obtain financing as well as to defer such financial commitment until after the Interconnection Customer may have a better understanding of the outcome of pending request for offers or other licensing proceedings.

To the extent Interconnect Financial Security or Interconnection Study Deposits provided by Interconnection Customers are surrendered to the CAISO in excess of

actual costs incurred, the CAISO intends to distribute any such proceeds to Scheduling Coordinators in a manner similar to the disposition of penalties collected by the CAISO for violations of its Rules of Conduct under Section 37.9.4 of the CAISO Tariff. Under Section 37.9.4 generally, Scheduling Coordinators will receive amounts in proportion to their contribution to the Grid Management Charge. Several stakeholders suggested that the Interconnection Customer originally responsible for the surrendered funds should receive Merchant Transmission Congestion Revenue Rights. However, given that the proceeds of any surrendered security or deposits are not going directly to finance transmission investment, the CAISO has not incorporated this element into the GIPR.

### **8. Project Refinement through the Phase II Interconnection Study**

The CAISO, in coordination with the applicable PTO(s), will conduct a Phase II Interconnection Study that will incorporate eligible Interconnection Requests from the previous Phase I Interconnection Studies. The role of the Phase II Interconnection Study is to:

- Update, as necessary, analyses performed in the Phase II Interconnection Studies to account for the withdrawal of Interconnection Requests,
- Identify final Reliability Network Upgrades needed to physically interconnect the Large Generating Facilities,
- Assign responsibility for financing the identified final Reliability Network Upgrades;
- Identify final Delivery Network Upgrades needed to interconnect those Large Generating Facilities selecting Full Capacity Deliverability Status;
- Assign responsibility for financing Delivery Network Upgrades needed to interconnect those Large Generating Facilities selecting Full Capacity Deliverability Status;
- Identify for each Interconnection Request final Participating TO's Interconnection Facilities and Interconnection Customer's Interconnection Facilities;
- Provide a +/- 20 percent estimate for each Interconnection Request of the final Participating TO's Interconnection Facilities and Interconnection Customer's Interconnection Facilities; and
- Optimize in-service timing requirements based on operational studies in order to maximize achievement of the Commercial Operation Dates of the Large Generating Facilities.

An important feature of the Phase II Interconnection Study is its close coordination with the CAISO's annual Transmission Planning Process, as set forth in Section 24 of Appendix EE of the current version of the CAISO Tariff and Section 24 of the MRTU Tariff. Under the current interconnection process, transmission upgrades needed for interconnection are identified, in large part, independently from transmission upgrades developed through the CAISO's annual Transmission Planning Process. The

GIPR enhances coordination between the CAISO's Transmission Planning Process and interconnection needs. This coordination will include, but not be limited to (i) inclusion, as a mitigation plan alternative, of any conceptual transmission plan(s) developed, but not rejected, in the current or former Transmission Planning Process intended to access generation development areas; (ii) sensitivities, to the extent possible, of the effect of transmission projects developed in the current Transmission Planning Process to achieve System Reliability and economic efficiency on Network Upgrades identified in the Phase I Interconnection Study, (iii) consideration in the Transmission Planning Process of future generation development potential in transmission upgrade designs; and (iv) consideration of phased development and option value of transmission projects to address uncertainty.

### **9. Accelerated Project Refinement and Facilities Study Process**

Several stakeholders advocated that the CAISO have the ability to accelerate certain projects through the interconnection process under pre-defined circumstances. In other words, an Interconnection Request that is entitled to acceleration would not have to wait for the outcome of the grouped Phase I and Phase II Interconnection Studies, but rather could be studied individually on an independent timeframe. The CAISO agreed with this suggestion and the GIPR incorporates this concept. The goal is to allow Interconnection Requests that are independent of others, and therefore not part of a Group Study, or those that seek to interconnect to available transmission approved by the CAISO and appropriate state agencies, to proceed through the interconnection process in a manner that ensures the project will achieve its desired Commercial Operation Date. In this regard, the CAISO believes that the GIPR timelines generally ensure timely interconnection. The formal accelerated study process provisions are set forth in GIPR LGIP Section 7.6.

The existence of an accelerated option should not imply, however, that all projects will be processed in the Phase I Interconnection Study in accordance with the maximum timelines provided. Rather, GIPR LGIP Section 6.6 notes that each individual study or Group Study may be completed prior to the maximum time where permitted based on factors including, but not limited to, the number of Interconnection Requests in the Queue Cluster Window, study complexity, and reasonable availability of subcontractors. Further, once an Interconnection Request completes the Phase I Interconnection Study process, the Interconnection Customer may request a determination whether the accelerated study process for the Phase II Interconnection Study applies. An accelerated Phase II Interconnection Study may start at any time in the Interconnection Study Cycle. Thus, the GIPR allows flexibility for an Interconnection Request to proceed expeditiously through both the Phase I and Phase II studies. The CAISO did not, however, elect to formalize an accelerated process for the Phase I Interconnection Study because it already proceeds as rapidly as reasonably possible, and care must be taken to provide a reasonable estimate of Network Upgrades given the financial consequences attendant to the Phase I Interconnection Study.

To qualify for the accelerated study process related to the Phase II Interconnection Study, the Interconnection Customer will have to satisfy each of the following criteria:

- The customer must have submitted an Interconnection Request during a Queue Cluster Window or be part of the Transition Cluster; and
- The project must not have been grouped with any other projects during the Phase I studies and it must have been identified as interconnecting to a point of available transmission during Phase I studies; and
- The customer must be able to demonstrate that the proposed GIPR timelines are not sufficient to accommodate its requested Commercial Operation Date.

In addition to the above accelerated project refinement and facilities study, GIPR LGIP Section 7.6 provides that the CAISO may apply for a waiver to accelerate any project, at any phase, to meet an executive or legislative order or to meet a California Public Utilities Commission (CPUC) or California Energy Commission (CEC) mandated requirement where the existing GIPR timelines are determined inadequate.

#### **10. Elimination of Optional Interconnection Studies and Re-Studies**

In conjunction with the revised scope of the Interconnection Studies under the GIPR, and consistent with the fundamental goal of the GIPR to expedite the study process, the CAISO has eliminated all of the provisions for Optional Interconnection Studies and for re-studies that are set forth in the current version of the LGIP. The CAISO does not consider these types of studies to be necessary under the revised GIPR study process and, in fact, considers these types of studies to pose the potential to divert Interconnection Study resources and perpetuate the types of delays in the interconnection process that have led to the current situation. The discussion of the GIPR Interconnection Study process above describes in detail how the new study process will address the needs underlying the current uses of these types of studies.

#### **11. Execution of an Interconnection Agreement.**

In GIPR LGIP Section 11, the CAISO has revised certain of the provisions of the current LGIP regarding the timelines and process for execution of an LGIA in order to address issues that have arisen with the current process. Section 11.1.1 of the GIPR LGIP has been revised to require that within 15 Business Days after the CAISO provides the final Phase II Interconnection Study to the Interconnection Customer, the applicable PTO(s) and the CAISO will tender a draft LGIA, together with draft appendices. The CAISO considers this a more appropriate schedule and milestone than the current 30 days after Interconnection Customer comments on the draft Interconnection Feasibility Study report. Section 11.2 of the GIPR LGIP has been

revised to require that the Interconnection Customer execute an LGIA within 90 days following completion of Phase II study or be deemed withdrawn. This provides the Interconnection Customer an additional 30 days beyond the current version of the LGIP to account for the delays in the LGIA negotiation process on the part of a number of Interconnection Customers that the CAISO has experienced in the past. Also, in GIPR LGIP Section 11.3, the CAISO has added minor clarifications to the description of the LGIA execution process to address confusion that has at times been caused by the provisions of the current LGIP in this regard. These revisions are in addition to the deletion of the specification of the current LGIP's requirements for Site Control, which, as discussed in Section V.D.2 above, are addressed in Section 3.5.1 of the GIPR LGIP under the subject of "Site Exclusivity."

## **E. Modifications to LGIP to Implement Transition Cluster**

The creation of the Transition Cluster constitutes a crucial component of the CAISO's efforts to relieve the existing interconnection queue backlog. In accordance with the Commission order on the Waiver Petition, the Transition Cluster consists of all Interconnection Requests pending prior to June 2, 2008 that were suspended as a result of the Waiver Petition, *i.e.*, not included in the Serial Study Group.

Generally, Interconnection Requests in the Transition Cluster will be processed in accordance with the procedures set forth in the new GIPR LGIP proposed in this filing. However, because of the different status of Interconnection Requests in the Transition Cluster relative to new Interconnection Requests going forward, there are several provisions that will apply specifically to projects in the Transition Cluster. These provisions are set forth in Appendix 2 to the new GIPR LGIP.

### **1. Queue Position**

As discussed at length by the CAISO and other intervenors in Docket No. ER08-960, the demarcation between the Serial Study Group and the Transition Cluster did not strictly follow in accordance with Queue Position. The result is that some Interconnection Requests lower in the queue were assigned to the Serial Study Group over higher queued Interconnection Requests. In order to account for this "swiss cheese" effect, minimize the potential for restudies of Serial Study Projects if subsequent Transition Cluster Interconnection Requests withdraw, and conform to the general GIPR construct, Section 2 of Appendix 2 specifies that the Queue Position of any Interconnection Request in the Transition Cluster will be deemed to be lower than that of any Interconnection Request in the Serial Study Group.

### **2. Requirements to Remain in Queue**

Appendix 2 to the GIPR LGIP provides that Interconnection Customers that are deemed to be included in the Transition Cluster, per the Commission's decision in



Docket No. ER08-960-000, will be deemed to have been withdrawn from the Transition Cluster unless the Interconnection Customer provides, within sixty days from the effective date of the GIPR LGIP, an additional study deposit equal to the difference between \$250,000 (or \$100,000 for smaller projects) and the total amount the Interconnection Customer currently has on deposit for the Interconnection Request and subsequent studies, plus any amounts paid in addition to these deposits if the actual study costs exceeded the deposits, under the current LGIP.<sup>30</sup> Appendix 2 also requires that Interconnection Customers in the Transition Cluster submit a statement of the requested deliverability status, a preferred Point of Interconnection and voltage level and all other technical data required by the LGIP, if not already submitted to the CAISO, and demonstration of Site Exclusivity equivalent to that required by Section 3.5.1 of the GIPR LGIP, or a posting of a Site Exclusivity deposit of \$250,000. These requirements generally operate to place those Interconnection Requests that fall within the Transition Cluster on an equal footing with those requests that will be studied under the main provisions of the GIPR LGIP. However, they recognize the need for a transition process from the current serial study approach for these projects, and they provide a reduced burden on smaller projects for the new study deposit amounts in an effort to ease that transition.

### **3. Treatment and Application of Study Deposits**

The main distinction between the general GIPR provisions and the Transition Cluster is the treatment of study costs. The GIPR LGIP provides for some refundability of the Interconnection Study Deposit even for Interconnection Requests that withdraw during the study process and do not proceed to execution of an LGIA. The Transition Cluster (Appendix 2) is more limited. Section 3.4 provides that the Transition Cluster Interconnection Study Deposit is nonrefundable from the moment of submission, except that the funds remaining after accounting for costs may be refunded only if the Interconnection Customer in the Transition Cluster executed an LGIA or upon approval of an unexecuted LGIA submitted to the Commission.

The difference in treatment of study costs follows the underlying premise of the GIPR – that developers will commit resources for commercially viable projects. The CAISO's intent with the Transition Cluster Interconnection Study Deposit is to compel developers to make a quick determination whether to stay in the Transition Cluster. Moreover, by requiring each Interconnection Customer to invest a total \$250,000, regardless of the amount invoiced for interconnection study work prior to this GIPR filing, it operates to equalize all Transition Cluster Interconnection Requests from a study cost standpoint.

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<sup>30</sup> As noted above, Small Generating Facilities seeking a Deliverability Assessment or Generating Facilities that have achieved Commercial Operation prior to the date of the Interconnection Request, and are seeking to increase their capacity by less than 20 MW, are only responsible for the difference between \$100,000 and the total amount already charged them for studies.

#### **4. Study Timelines and Efforts to Expedite Completion**

The CAISO is proposing the following schedule for completing the Interconnection Studies for projects in the Transition Cluster. This schedule represents the outcome of the CAISO's analysis as to what constitutes a feasible timeframe for completing study activities for the Transition Cluster, given the extensive size of the CAISO's current queue and an estimation of what projects will remain in the Transition Cluster going forward. The Phase I Interconnection Study, as described in Section 6 of the GIPR LGIP, including the grouping and Interconnection Base Case Data development, will commence no later than December 1, 2008 or sixty calendar days after the effective date of Appendix 2 to the GIPR LGIP, whichever is later. Results of the Phase I Interconnection Study will be provided to the Interconnection Customer within 240 calendar days after commencement. The Phase II Interconnection Study, as described in Section 7 of the GIPR LGIP, will commence no later 120 calendar days after publication of the Phase I Interconnection Study report. Results of the Phase II Interconnection Study will be provided to the Interconnection Customer within 330 calendar days of the effective date of Appendix 2 to the GIPR LGIP.

Similarly, in recognition that the Transition Cluster is in fact just that, a transition, Section 6 of Appendix 2 provides that Interconnection Customers will have 120 calendar days, rather than the 90 days set forth in the general GIPR LGIP, to post the initial Interconnection Financial Security.

Finally, and perhaps most significantly, the CAISO commits as part of the Transmission Planning Process commencing in 2009 to perform technical analyses intended to identify, at a minimum, conceptual transmission upgrades that may access Generating Facilities in the Transition Cluster that are located in Energy Resource Areas. In so doing, the CAISO will attempt to ensure, along with the use of operational studies, that renewable resources included in the Transition Cluster can meet the earliest practicable Commercial Operation Dates.

#### **F. Changes to Study Agreements and "Roles and Responsibilities Agreement"**

Based on the significant changes to the study process under GIPR, the CAISO is proposing, for purposes of the GIPR process, to use a single agreement. This study agreement, known as the Large Generator Interconnection Study Process Agreement ("LGISPA"), will be provided to each Interconnection Customer with a valid Interconnection Request within 30 calendar days of the close of the Queue Cluster Window. The LGISPA is modeled on the existing LGIP Interconnection System Impact Study Agreement and appendices, with modifications made in order to conform the LGISPA to the study process set forth in the GIPR LGIP, including the incorporation of references to the study deposit and financial security requirements of the GIPR LGIP.

Notably, the LGISPA dispenses with the concept of a preliminary feasibility study. The CAISO decided to eliminate the feasibility study component of the interconnection process because doing so will streamline the process and there is, in the CAISO's estimation, little need for a discrete feasibility study under GIPR. The CAISO has committed to provide updated Base Case information to Market Participants and generation developers during multiple points in the GIPR process in order to allow parties to use current information to assess the feasibility of potential generation projects, thus satisfying the purpose of the feasibility study without the need for the study itself.

In addition, the CAISO is also proposing revisions to the "Roles and Responsibilities Agreement" attached to the LGIP, which establishes the working relationship between the CAISO and the PTOs for all of the activities in the Interconnection Study process. The CAISO's revisions conform the provisions of this agreement to the new GIPR LGIP provisions, including some minor revisions to the body of the agreement and substantial revisions to Attachment A to the agreement to replace the current study process steps and timelines with the new steps and timelines for the GIPR study process.

#### **G. Conforming and Other Modifications to the LGIA**

In addition to the new GIPR LGIP, the CAISO is also proposing a GIPR-specific LGIA that contains modifications necessary to track the process changes implemented by the GIPR LGIP. The vast majority of these modifications are non-substantive in nature, insofar as they merely update the LGIA in order to reference the relevant provisions of the GIPR LGIP that govern issues such as posting and refund of Interconnection Financial Security, particularly including revisions to LGIA Articles 2.4, 11.3, 11.4, 11.5, and 12.2. This GIPR LGIA is set forth in Appendix HH of the currently effective CAISO Tariff and Appendix Z of the MRTU Tariff.

In addition to the revisions specifically to conform to the GIPR LGIP, the CAISO is proposing to revise the LGIA to add references to "Applicable Reliability Standards" in several sections and to remove the *pro forma* agreement regarding compliance with reliability standards from Appendix G to reflect the results of the Commission's mandatory reliability standards initiative. The CAISO is also proposing (i) to revise LGIA Article 5.16 to clarify the conditions for and maximum duration of any suspension of work pursuant to the LGIA, (ii) to revise the definitions of "Commercial Operation" and "Commercial Operation Date" and LGIA Appendix E to clarify the manner in which Commercial Operation can occur and the required notice of the Commercial Operation Date for a new Generating Facility, and (iii) to revise LGIA Appendix H to remove outdated transition provisions.

Finally, the CAISO is proposing to include language in Article 11.4.2 of the GIPR LGIA to specify that in the event the PTO is a joint owner with an Affected System or

with any other co-owner of a facility affected by the project, the PTO's obligation to reimburse the Interconnection Customer for payments made to address the impacts of the project on the system shall not exceed the proportionate amount of the cost of any upgrades attributable to the proportion of the jointly-owned facility owned by the PTO.

#### **H. Other Changes to Currently Effective CAISO Tariff and MRTU Tariff**

The CAISO is also proposing several minor conforming changes to Section 25 and Appendices A, V, DD, and EE of the currently effective CAISO Tariff and Sections 24 and 25 and Appendices A, T, and V of the MRTU Tariff. For instance, the CAISO has added provisions to all of those sections and appendices in order to refer to the new GIPR appendices and to clarify whether the provisions of those sections and appendices are intended to refer to the current LGIP and LGIA or the GIPR LGIP and LGIA. The CAISO has also added several new defined terms to Appendix A of both tariffs to aid in understanding the provisions of the GIPR LGIP and associated documents. In addition, the CAISO has incorporated references to the GIPR processes into the provisions regarding the CAISO Transmission Planning Process in Section 24 of the MRTU Tariff and Appendix EE of the current CAISO Tariff. Further, in response to stakeholder requests, the CAISO has revised the definitions of "Commercial Operation" and "Commercial Operation Date" in Appendix A to clarify the manner in which Commercial Operation can occur with respect to a project that will be developed in "phases."

The CAISO has also revised the definition of "Reliability Network Upgrades" to clarify the nature of those upgrades and the manner in which they will be identified in the new GIPR forms of Interconnection Studies. In short, there has long been some ambiguity regarding whether a thermal overload of a transmission facility resulting from the injection of Energy from a proposed generating project can constitute a Reliability Network Upgrade or must always be classified as a Delivery Network Upgrade, which is generally an upgrade needed to alleviate a Constraint.<sup>31</sup> The current definition of "Reliability Network Upgrades" suggests that such upgrades are limited to those "necessary to remedy short circuit or stability problems resulting from the interconnection of the Large Generating Facility...." However, current LGIP Section 3.3.2 provides, "[t]he Interconnection Studies will identify direct Interconnection Facilities and required Reliability Network Upgrades necessary to mitigate *thermal overloads* and voltage violations, and address short circuit, stability, and reliability issues associated with the requested Interconnection Service." The included modification specifies the circumstances when an upgrade to address a thermal overload may constitute a Reliability Network Upgrade and therefore conforms the definition of "Reliability Network Upgrade" to GIPR LGIP Section 6.3.1, which, in turn, continues the understanding expressed in LGIP Section 3.3.2 that a thermal overload may result in the need for a Reliability Network Upgrade.

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<sup>31</sup> "Constraint" is defined by the CAISO Tariff as "[p]hysical and operational limitations on the transfer of electrical power through transmission facilities."

## **VI. EFFECTIVE DATE**

With respect to the changes to the CAISO's existing tariff, the CAISO requests that these changes go into effect on September 29, 2008, the first Business Day at least 60 days after the date of filing, pursuant to the Commission's prior notice rule.

With respect to the changes to the MRTU Tariff, the CAISO requests that the Commission approve the changes in this Amendment to be effective upon implementation of MRTU. As discussed in the monthly status reports, the CAISO has submitted in Docket No. ER06-615, the CAISO will not be able to announce a new proposed implementation date for MRTU until the CAISO is confident that the MRTU software is operating successfully. Accordingly, the CAISO is filing clean MRTU Tariff sheets without indicating a proposed effective date and therefore requests waiver of Order No. 614 and applicable provisions of Section 35.9 of the Commission's regulations.

The CAISO understands that in the absence of a proposed effective date the Commission is not compelled to take any action on the changes to the MRTU Tariff within the 60-day timeframe prescribed by the Federal Power Act. Although the Commission is not compelled to take action within any prescribed timeframe, the CAISO requests that the Commission issue an order regarding the changes to the MRTU Tariff contained in this Amendment within 60 days or as soon thereafter as possible. A timely order will allow a more orderly transition to MRTU for the CAISO and its Market Participants.

Because the exact date of MRTU implementation is unknown at this time, the CAISO, pursuant to Section 35.11 of the Commission's regulations, also requests waiver, if necessary, of Section 35.3 of the Commission's regulations, 18 C.F.R. § 35.3, in order to permit the clean MRTU Tariff sheets contained in this Amendment to become effective more than 120 days after the date this Amendment was filed. Making the filing at this time hopefully will permit the CAISO, Market Participants, state authorities, and the Commission to resolve the issues discussed herein prior to the implementation of MRTU and provide greater certainty to the CAISO Markets. Granting a waiver in this instance would be consistent with the similar waivers of Section 35.3 that the Commission has granted for other MRTU Tariff filings.

## **VII. SERVICE**

The CAISO has served copies of this transmittal letter, and all attachments, on the California Public Utilities Commission, the California Energy Commission, and all parties with effective Scheduling Coordinator Service Agreements under the CAISO Tariff. In addition, the CAISO is posting this transmittal letter and all attachments on the CAISO Website.

### VIII. CONCLUSION

For the reasons set forth above, the CAISO respectfully requests that the Commission accept the amendments to the CAISO Tariff and MRTU Tariff described herein.

Respectfully submitted,



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Counsel for the California Independent  
System Operator Corporation

Dated: July 28, 2008

**Exhibit ISO-1**

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**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

California Independent System Operator )      Docket No. ER08-\_\_\_\_-000  
Corporation )

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**PREPARED DIRECT TESTIMONY  
OF  
STEPHEN RUTTY**

**Introduction**

**Q. Please state your name and business address.**

A. My name is Stephen Ruty. My business address is California Independent System Operator Corporation (CAISO), 151 Blue Ravine Road, Folsom, California 95630.

**Q. By whom and in what capacity are you employed?**

A. I am the Manager of Grid Assets at the CAISO.

**Q. Please describe your professional and educational background.**

A. I received a BSEE from California Polytechnic State University, San Luis Obispo and a Management for Technical Personnel Certificate from the University of California, Los Angeles. I am registered in the State of California as a Professional Engineer in Electrical Engineering. I worked for the Los Angeles Department of Water and Power for 16 years (1984-2000) in various engineering



1 positions of increasing responsibilities, most recently in the Transmission  
2 Engineering section. I joined the CAISO in 2000 as a Transmission Engineer in  
3 Grid Assets, responsible for implementing the CAISO Maintenance Standards.  
4 Over the last 8 years, my responsibilities have increased as I was promoted to  
5 Senior, then Lead Transmission Engineer. In early 2007, I was promoted to  
6 Manager of Grid Assets. As Manager of Grid Assets, I oversee the Transmission  
7 Maintenance group, the Loads and Resources group, and the Resources  
8 Interconnections group.

9  
10 **Q. Please describe your role in the development of the Generation**  
11 **Interconnection Process Reform (GIPR) proposal.**

12 **A.** As mentioned in the prior question, I oversee the Resources Interconnection group,  
13 which is responsible, among other things, for the implementation of the CAISO's  
14 Large Generation Interconnection Procedures (LGIP). In this capacity, I have  
15 been responsible for the development of the GIPR from its beginning and will be  
16 responsible for its implementation.

17  
18 **Q. What is the purpose of your testimony?**

19 **A.** My testimony will discuss several of the primary elements of the GIPR proposal  
20 and detail why certain policy decisions were made.

21

22

1 **Overview of GIPR Proposal**

2 **Q. Please describe the circumstances that gave rise to the GIPR proposal.**

3 **A.** The foundation for the current generation interconnection process was established  
4 by the Commission in Order No. 2003 and its progeny. The CAISO's LGIP and  
5 accompanying Large Generator Interconnection Agreement (LGIA), which  
6 incorporate the directives of Order No. 2003, have successfully assured the open  
7 transmission access requirement for new generation Interconnection Customers in  
8 California. However, over the past few years, several factors, largely  
9 unanticipated at the time of Order No. 2003's adoption, including the very large  
10 number of Interconnection Requests for renewable generation, have imposed  
11 significant challenges to the efficiency of the CAISO's present "serial" generation  
12 interconnection study approach. At the time of issuance of the GIPR Issues  
13 Identification Paper dated January 18, 2008, which initiated the GIPR stakeholder  
14 process, the CAISO had 173 active Interconnection Requests totaling 57,686  
15 MW. This number exceeds the CAISO historic peak of 50,270 MW. As of the  
16 date of this filing, those numbers have swelled to 361 Interconnection Requests  
17 totaling more than 105,000 MW that are pending in the CAISO interconnection  
18 queue of which over 68,000 MW represent renewable resources. The large  
19 number of requests and high level of MW capacity in the CAISO Controlled Grid  
20 Generation interconnection queue have overwhelmed available resources, led to  
21 delays within the study process, and exposed, or reinforced, fundamental  
22 deficiencies in the current LGIP interconnection process.

1 **Q. Under its existing interconnection procedures, what does the CAISO perceive**  
2 **as the structural elements responsible for the inability to maintain an**  
3 **efficient interconnection process?**

4 **A.** There are two primary challenges. First, a critical shortcoming of the CAISO's  
5 current interconnection procedures involves the very low monetary and data  
6 requirements imposed on a generation developer to initiate and remain in the  
7 process. The requirements incorporated into the CAISO's existing LGIP and  
8 LGIA largely track the Commission's standard documents and create undue  
9 incentives for obtaining and maintaining a Queue Position, rather than focusing  
10 on the viability of the particular generation project. Related to this shortcoming is  
11 the ease of, or lack of consequences to, an Interconnection Customer withdrawing  
12 its Interconnection Request. The strategic value of Queue Position, coupled with  
13 the relatively low cost of commencing and exiting the interconnection process,  
14 has materially contributed to the high number of projects entering the CAISO  
15 interconnection queue even though the majority of these projects have little  
16 likelihood of ever becoming operational.

17  
18 The second challenge under the current regime is the CAISO's continuing  
19 reliance on a serial queue process. Processing each Interconnection Request  
20 sequentially in queue order effectively delineates the cost responsibility of each  
21 generator in the queue, if the queue is being efficiently processed. However, in  
22 just the few short years of experience with the queue process under the existing  
23 LGIP, it has become unmanageable. For example, studying a large generator in

1 the queue may reveal a host of Network Upgrades needed to interconnect that  
2 generator. Said upgrades must then be modeled into future studies for generators  
3 farther along in the queue. If that large generator drops out of the queue, each  
4 subsequent study would have to be reconfigured accordingly. These types of  
5 challenges routinely slow the queue-clearing process and lead to an unmanageable  
6 situation - one where Interconnection Requests are coming in to the CAISO faster  
7 than the CAISO can process them, thus creating an infinite loop of re-studies.  
8 This is the fundamental flaw that the CAISO has sought to address in the GIPR.

9  
10 **Q. How does the GIPR proposal address those challenges?**

11 **A.** The GIPR is the culmination of an effort by the CAISO staff and the CAISO  
12 stakeholder community to reform the CAISO's generator interconnection process  
13 in such a manner that, first and foremost, it is more predictable and results in a  
14 greater level of cost certainty so that viable projects have a clearer and more  
15 efficient path to interconnecting with the CAISO Controlled Grid. To do this, the  
16 GIPR seeks to reduce the backlog and encourage Interconnection Requests that  
17 more closely resemble system needs by increasing the level of developer financial  
18 commitment to participate in the interconnection process. The CAISO's proposal  
19 requires greater upfront payments from project developers to initiate the  
20 interconnection process as well as creates additional financial exposure for  
21 withdrawal of the project from the process prior to the new Generating Facility  
22 becoming operational. However, the CAISO has also attempted to avoid  
23 dampening legitimate generation development that could result from increasing

1 the financial commitment of Interconnection Customers without accounting for  
2 the inherent and inevitable uncertainty of generation development and therefore  
3 has built in the means for a developer to mitigate its risk under defined  
4 circumstances. Further, the GIPR builds on the success of Order No. 2003, but  
5 makes certain incremental improvements in order to streamline the  
6 interconnection process. For example, while the existing *pro forma* LGIP allows  
7 the option of processing Interconnection Requests using Clustering, the GIPR's  
8 primary structural departure from the *pro forma* LGIP is its adoption of the  
9 Clustering approach as the exclusive option for processing Interconnection  
10 Requests, as opposed to the serial approach employed currently by the CAISO.  
11 Because of the move from a serial to Clustering approach, a number of changes  
12 needed to be made to the CAISO's current LGIP and LGIA in order to implement  
13 this approach. In all, however, the GIPR model is narrowly designed as an  
14 incremental improvement to the Commission's *pro forma* interconnection  
15 procedures.

16  
17 **Q. What are the other policy goals underlying the GIPR proposal?**

18 A. Several additional policy initiatives will benefit from reform of the  
19 interconnection process. First, California has a Renewable Portfolio Standard  
20 program that is leading to increased pressure to quickly interconnect renewable  
21 resources. Many of these renewable resources (wind, for example) present certain  
22 study difficulties due to the intermittent nature of their respective fuel sources.  
23 These studies could further slow down the interconnection queue under the

1 current regime. It is critical that the CAISO's interconnection process not stand in  
2 the way of getting these renewable resources on line. Second, reforming the  
3 interconnection process presents an opportunity to more closely align generator  
4 interconnections with the CAISO's formal Transmission Planning Process (TPP).  
5 This link is described in more detail by the testimony provided by Robert Sparks.

6  
7 **Q. With whom did the CAISO consult in designing the GIPR and identifying**  
8 **the need for interconnection reform?**

9 **A.** Before embarking on the GIPR stakeholder process, the CAISO collaborated with  
10 the California Public Utilities Commission (CPUC), Participating Transmission  
11 Owners (PTOs), and members of the generation community that originally  
12 requested meetings with the CAISO to discuss and identify ways to improve the  
13 efficiency of the generator interconnection process while preserving the  
14 fundamental non-discriminatory underpinnings of Order No. 2003 and its progeny.  
15 The GIPR itself, however, was developed through the CAISO stakeholder process.  
16 An accurate and comprehensive list of stakeholder activities is included in Section  
17 IV.D.2 of the GIPR transmittal letter.

18  
19 **GIPR Design Elements**

20 **Q. What are the primary elements of the GIPR design?**

21 **A.** The GIPR proposal is described in detail in the transmittal letter accompanying  
22 this filing and the whitepapers posted to the CAISO's website at

1 <http://www.caiso.com/1f42/1f42c00d28c30.html>. The following are the major  
2 design elements of the GIPR generation interconnection process.

3 ○ First, the GIPR process adopts a Clustering approach such that all  
4 Interconnection Requests are submitted in a Queue Cluster Window. Within  
5 that cluster, all projects will be treated with equal priority such that there will  
6 be no “queue” within the cluster.

7 ○ Second, the process of conducting Interconnection Studies will be  
8 consolidated from three (Interconnection Feasibility Study, Interconnection  
9 System Impact Study and Interconnection Facilities Study) into two (Phase I  
10 Interconnection Study and Phase II Interconnection Study).

11 ○ Third, the GIPR proposal will use only one study agreement, called the Large  
12 Generator Interconnection Process Study Agreement.

13 ○ Fourth, certain financial commitments will be enhanced to ensure that projects  
14 submitted in the interconnection process are commercially viable and are not  
15 submitted prematurely. These include a study deposit of \$250,000, a deposit  
16 in lieu of Site Exclusivity of \$250,000 if Site Exclusivity has not been  
17 established, and the posting of certain Interconnection Financial Security  
18 described later in this document.

19  
20 **Q. The GIPR proposal appears to be a significant overhaul to the CAISO’s**  
21 **existing interconnection process. Did the CAISO consider more modest**  
22 **changes?**

1 A. The CAISO determined, through a comprehensive analysis of its interconnection  
2 practices, that without further interconnection queue reforms, Clustering by itself  
3 will not by itself effectively address the fundamental problem of reducing the  
4 unrealistic level of requests and capacity seeking interconnection and the  
5 uncertainties associated with project withdrawals and restudies. Therefore, the  
6 CAISO is proposing a number of modifications to its current interconnection  
7 process that seek to address existing shortcomings by imposing greater financial  
8 commitments on generation developers, but in return providing generation  
9 developers with the benefit of greater efficiency and certainty. These reforms  
10 complement the GIPR's departure from the serial study approach and allow the  
11 CAISO to clear the current backlog and ensure that the GIPR interconnection  
12 process did not become similarly bogged down. While the GIPR proposal is  
13 aggressive, it is largely an iterative improvement on, not a replacement of, the  
14 Order No. 2003 paradigm. The CAISO felt an aggressive proposal was needed  
15 beyond the existing LGIP in order to achieve the goal of an efficient and fair  
16 interconnection process, and to avoid the potential of having to address these  
17 same issues again in the future.

18

19 **Clustering**

20 **Q. Please describe why the serial "queue position" approach was abandoned in**  
21 **favor of the clustering approach.**

22 A. As I noted above, over the past few years, several factors have imposed significant  
23 challenges to efficiently processing Interconnection Requests under the CAISO's



1 present “serial” generation Interconnection Study approach, including the very large  
2 number of Interconnection Requests for renewable generation. The large number of  
3 requests and high level of MW capacity in the queue have overwhelmed available  
4 resources, led to delays and frustration with the study process, and exposed, or  
5 reinforced, fundamental deficiencies in the current LGIP. In looking at ways to  
6 improve the interconnection process, it quickly became clear that the serial  
7 processing would have to be revisited. While serial processing has the benefit of  
8 clear delineation of priorities and rights, the CAISO concluded that the inevitable  
9 restudies and changes that accompany the serial study process make managing such a  
10 large volume of Interconnection Requests in this manner almost impossible, such that  
11 the drawbacks far outweigh the benefits. After internal discussions and a lengthy  
12 stakeholder process, adopting a Clustering approach for processing Interconnection  
13 Requests was deemed the best approach to unclog the current queue and manage the  
14 interconnection process on a going-forward basis.

#### 16 **Interconnection Deposits**

17 **Q. Why did the CAISO raise the financial deposit from generator**  
18 **interconnection applicants relating to the costs of Interconnection Studies,**  
19 **which I believe you are calling the Interconnection Study Deposit?**

20 **A.** The most fundamental reason the CAISO decided to increase the Interconnection  
21 Study Deposit is to ensure that each project that seeks interconnection to the  
22 CAISO Controlled Grid had a meaningful financial stake in the process and  
23 therefore reasonably could be considered viable or likely to eventually reach  
24 Commercial Operation. The *pro forma* LGIP structure permitted all would-be

1 interconnecting generators to enter the queue and be studied with a very low level  
2 of financial commitment. While certain obligations must have been satisfied to  
3 complete an Interconnection Request, the low barriers to entry, coupled with the  
4 priorities inherent in the serial study process, created the incentive for projects to  
5 enter the queue as early as possible, even if the project was not fully planned or  
6 financed. This required the CAISO and PTOs to spend resources studying  
7 projects that in many cases were not ready to interconnect. It has been my  
8 experience that a significant number of projects that have entered the queue have  
9 never finished the process and begun Commercial Operation.

10  
11 **Q. How did the CAISO decide on the \$250,000 value for the Interconnection**  
12 **Study deposit?**

13 **A.** As discussed above, the CAISO identified a need to better ensure the likelihood  
14 that each project being studied was commercially viable and increasing the study  
15 deposit is a straightforward and effective way to accomplish this goal. The  
16 CAISO believes \$250,000 is a just and reasonable amount. Stakeholders  
17 suggested both higher and lower amounts. The CAISO chose \$250,000 because,  
18 while substantial, it is not substantially more than the total of the existing LGIP-  
19 required deposits for a project that completes the entire interconnection process.  
20 By making the deposit due at the beginning of the process, however, the CAISO  
21 will deter speculative projects that lack a reasonable chance of achieving  
22 Commercial Operation from entering the queue. Another reason behind the  
23 CAISO's decision to require one single \$250,000 deposit up front is to reduce a

1 project's administrative needs. The current LGIP requires the submission of  
2 deposits at several stages of the interconnection process: a \$10,000 deposit at the  
3 initiation of the Interconnection Request, a \$10,000 deposit to execute the  
4 Interconnection Feasibility Study Agreement, a \$50,000 deposit to execute the  
5 Interconnection System Impact Study Agreement and \$100,000 deposit to execute  
6 the Interconnection Facilities Study Agreement.

7  
8 **Q. Does raising the deposit to \$250,000 discriminate against small generator**  
9 **applicants?**

10 **A.** No. As a preliminary matter, in reviewing its interconnection procedures during  
11 this process, the CAISO saw no evidence that small projects generally are less  
12 costly to study and process. Second, the GIPR reforms proposed in this filing  
13 only impact the CAISO's Large Generator Interconnection Process. Small  
14 generators still have the benefit of the Small Generator Interconnection  
15 Procedures (SGIP), under which the CAISO will maintain a separate study  
16 process. Also, the few SGIP-sized projects that for various reasons are required  
17 to go through the LGIP will have a lower required study deposit amount of  
18 \$100,000. Finally, based on my knowledge of the CAISO's existing  
19 interconnection queue, it is more and more common now for small generation  
20 projects to be well-financed by entities with more than sufficient resources to  
21 cover this deposit. Ensuring that all generators seeking interconnection are in fact  
22 commercially viable is precisely the point of the increased deposit.

23

1

2

3 **Q. Notwithstanding the need to ensure commercial viability, is the increased**  
4 **Interconnection Study Deposit a structural barrier to entry that will**  
5 **discourage competition?**

6 **A.** No, quite the contrary. The inability of a planned and financed Generating  
7 Facility to interconnect to the CAISO Controlled Grid because of a clogged  
8 interconnection queue is the structural barrier to entry that the GIPR process seeks  
9 to remedy. Ensuring that applicants are appropriately developed and funded is a  
10 prudent measure to ensure that the generators that have a good chance of actually  
11 interconnecting to the grid are studied at the appropriate time.

12

13 **Q. Does a withdrawing applicant have any ability to recoup its deposit?**

14 **A.** Yes. Portions of the deposit become non-refundable as the interconnection  
15 process progresses and costs are incurred. For example, all of the deposit, less  
16 any administrative costs, is refundable up to 30 days after the Scoping Meeting,  
17 after which \$100,000 of the deposit becomes non-refundable. This creates an  
18 incentive for a generator to withdraw from the interconnection process and recoup  
19 its deposit if the Scoping Meeting provides that generator with an indication that  
20 interconnecting the facility at issue would be, for example, physically or  
21 economically infeasible. Similarly, the remaining amount of the deposit does not  
22 become non-refundable until 30 days after the Results Meeting, providing another  
23 window for a project to withdraw and recoup the remainder of its deposit after the

1 required Network Upgrade proxy costs are known. This incentive structure  
2 ensures that those generators that continue to progress through the interconnection  
3 process are commercially viable and are likely to interconnect to the grid on time.  
4

5 **Q. How did you derive the Site Exclusivity Deposit?**

6 A. Currently, an applicant must demonstrate Site Control or post an additional  
7 \$10,000 deposit. If Site Control has not been demonstrated at the time of  
8 executing the Large Generator Interconnection Agreement, then the  
9 Interconnection Customer must post an additional deposit of \$250,000 that  
10 becomes nonrefundable and will be applied to the cost of constructing needed  
11 transmission upgrades. Under the GIPR, we have simply accelerated the time for  
12 submitting the deposit if Site Exclusivity cannot be demonstrated. However,  
13 unlike under the current LGIP, the Site Exclusivity Deposit is refundable. As  
14 discussed below, the GIPR relies on Interconnection Financial Security to ensure  
15 developer commitment.  
16

17 **Interconnection Financial Security**

18 **Q. What is Interconnection Financial Security under the GIPR Proposal?**

19 A. The GIPR LGIP requires an Interconnection Customer to post certain financial  
20 security upon reaching particular milestones within the interconnection process.  
21 This security is referred to as Interconnection Financial Security in the GIPR  
22 LGIP. This is consistent with the current requirement to post security contained  
23 in Section 11.5 of the CAISO's existing LGIA. However, the GIPR makes one

1 notable change to this requirement. Under the GIPR, an Interconnection  
2 Customer will be required to post sufficient Interconnection Financial Security to  
3 cover 20 percent of the estimated costs of Network Upgrades (or \$500,000,  
4 whichever is greater) identified in the Phase I Interconnection Study within 90  
5 days of the delivery of the Phase I Interconnection Study. Thus, GIPR requires an  
6 earlier posting of security than is required under the CAISO's current LGIA. This  
7 timing change necessitated moving the security posting requirement from the  
8 LGIA to the LGIP because the LGIA will not have been executed by the time the  
9 initial posting of security is required. The CAISO believes that requiring an  
10 Interconnection Customer to post a portion of its required security earlier will  
11 remove the incentive for Interconnection Customers to stay in the interconnection  
12 process if further progress on their project is unlikely because, for example,  
13 financing has not been secured.

14  
15 **Q. Under what circumstances does the CAISO propose to call the**  
16 **interconnecting generator's Interconnection Financial Security?**

17 **A.** Generally under the GIPR, when an Interconnection Customer withdraws from  
18 the interconnection process, that customer will surrender the Interconnection  
19 Financial Security posted for Network Upgrades to date. Section 9.4 of the GIPR  
20 LGIP explains the mechanics of this process. Section 9.4 does list four categories  
21 of circumstances under which portions of the Interconnection Financial Security  
22 will be returned to the Interconnection Customer. If the Interconnection  
23 Customer is withdrawing pursuant to circumstances covered by one of these four

1 categories, the CAISO will refund certain portions of the Interconnection  
2 Financial Security not needed to cover costs incurred on behalf of that customer  
3 to date.

4  
5 **Q. Please describe the significance of the four reasons that will lead to some**  
6 **level of refundability for the Interconnection Financial Security?**

7 **A.** The CAISO realizes that the decision to follow through with the construction and  
8 interconnection of a generating facility is a complex one and, in many instances,  
9 circumstances outside the control of the Interconnection Customer will require  
10 withdrawal of the project. The CAISO decided to build into the GIPR the ability  
11 to return portions of a customer's security if that customer is withdrawing: (1)  
12 because it fails to secure a power purchase agreement; (2) because it fails to  
13 secure the necessary permits; (3) because of a cost increase in the PTO's  
14 Interconnection Facilities exceeds a specified threshold; or (4) because there is a  
15 material change in the Point of Interconnection dictated by the CAISO. These  
16 are memorialized in Section 9.4.1 of the GIPR LGIP. The so-called "off ramp"  
17 detailed in Section 9.4.2 of the GIPR LGIP provides that, as time goes on, a  
18 progressively smaller portion of the Interconnection Financial Security will be  
19 refunded to the customer. The CAISO believes that this sliding scale encourages  
20 timely decision making by project sponsors and ensures that projects stay in the  
21 CAISO interconnection process only as long as their sponsors are committed to  
22 following through with the project.

1 **Q. If an interconnection customer withdraws for reasons other than the reasons**  
2 **listed in LGIP Section 9.4.1, does it surrender its posted Interconnection**  
3 **Financial Security.**

4 **A. Yes.**

5  
6 **Q. What does the CAISO do with surrendered security that exceeds actual costs**  
7 **incurred on behalf of a particular Interconnection Customer?**

8 **A. In circumstances where the CAISO calls a customer's Interconnection Financial**  
9 **Security and such funds exceed the actual costs incurred to date on behalf of that**  
10 **customer, the CAISO will treat the funds in accordance with CAISO Tariff**  
11 **Section 37.9.4. The CAISO believes this is appropriate because all users of the**  
12 **CAISO Controlled Grid benefit from an orderly and efficient interconnection**  
13 **process.**

14  
15 **Site Exclusivity (formerly Site Control)**

16 **Q. Why did the CAISO add a new definition of 'Site Exclusivity'?**

17 **A. The CAISO added a new definition of Site Exclusivity in order to address two**  
18 **needed changes to the existing definition of Site Control. First, the new definition**  
19 **addresses concerns raised by the federal Bureau of Land Management ("BLM")**  
20 **about site control for generators on federal land. After consultation with BLM,**  
21 **the "Site Exclusivity" definition accommodates BLM's concerns. It does so by**  
22 **granting BLM the authority to determine what will constitute sufficient proof of**  
23 **Site Exclusivity on land under its jurisdiction and requiring that, absent a showing**



1 of an alternative approved by BLM, a final use permit be demonstrated. Second,  
2 the *pro forma* definition of Site Exclusivity is meant to make clear that the  
3 applicant must demonstrate Site Exclusivity for at least 50 percent of the acreage  
4 reasonably necessary to accommodate the generating facility. The original  
5 definition of Site Control could not be modified because there are projects that  
6 will continue to be processed under the existing LGIP.

### 8 Consolidation of Study Agreements

9 **Q. Why does the CAISO propose to use just one study agreement instead of the**  
10 **three agreements under the prior program?**

11 **A.** The CAISO believes that the consolidation of the *pro forma* Interconnection  
12 Feasibility Study Agreement, Interconnection System Impact Study Agreement,  
13 and Interconnection Facilities Study Agreement into one study agreement, called  
14 the Large Generator Interconnection Study Process Agreement (LGISPA), will  
15 further streamline the interconnection process. First, there will simply be fewer  
16 agreements to negotiate, reducing the time and expense required to complete the  
17 interconnection process. Second, the CAISO made a determination that the same  
18 rights and obligations can be reasonably contained in one agreement. This  
19 determination was driven, in part, by the CAISO's decision to do away with the  
20 separate Interconnection Feasibility Study, the reasons for which are explained in  
21 the testimony of Mr. Robert Sparks. The LGISPA follows generally the format of  
22 the CAISO's existing Interconnection System Impact Study Agreement, but has  
23 been modified to address the Interconnection Customer's rights and obligations

1 (as well as those of the CAISO and PTO) under the Phase I and Phase II  
2 Interconnection Studies.

3  
4 **Impact on Current Generation Interconnection Queue**

5 **Q. In addition to developing the GIPR process, did the CAISO formulate a plan**  
6 **to address the existing queue backlog?**

7 **A.** Yes. The CAISO issued a Market Notice on April 8, 2008 establishing, under its  
8 existing tariff authority, a going forward Queue Cluster Window to accept new  
9 Interconnection Requests (IRs) submitted within the opening and closing dates for  
10 the defined Queue Cluster Window. This will be considered the “Initial GIPR  
11 Cluster.” The CAISO also established a “Serial Study Group” for advanced  
12 projects in the existing queue and a “Transition Cluster” for projects in the  
13 existing queue that had not progressed past certain milestones in the  
14 interconnection process. Both are described in detail in the transmittal letter  
15 included with this filing. On May 15, 2008, the CAISO filed a waiver petition  
16 with the Commission in Docket No. ER08-960-000 to gain the requisite authority  
17 to implement the Serial Study Group and the Transition Cluster before approval  
18 of the GIPR. This waiver petition was unconditionally approved by the  
19 Commission on July 14, 2008.

20

21

22

1 **Q. In the instant filing, does the CAISO request any additional authority as**  
2 **regards the Transition Cluster and existing projects?**

3 **A.** Yes. The CAISO is requesting that all projects in the Transition Cluster be  
4 required to submit or increase the total study deposit for each IR to \$250,000  
5 (\$100,000 for projects 20 MW or less that do not otherwise qualify for the SGIP),  
6 provide proof of Site Exclusivity for each IR in the Transition Group or post  
7 \$250,000 deposit in lieu of Site Exclusivity, indicate requested deliverability  
8 status, provide all outstanding technical data, and execute a new Large Generator  
9 Interconnection Study Process Agreement.

10

11 **Q. What is the justification for imposing these requirements on projects already**  
12 **in the interconnection queue?**

13 **A.** The legal justification for this approach is contained in the transmittal letter  
14 accompanying the filing. From a practical standpoint, these changes are critical to  
15 clearing out the existing backlog. As noted earlier, the backlog in processing  
16 Interconnection Requests in the queue is an existing problem that gave rise to the  
17 Commission's inquiry in Docket No. AD08-2-000 and to the GIPR process.  
18 However, if the CAISO is not proactive in clearing out the existing queue, the  
19 GIPR process (after the transition) will likely be significantly delayed, which  
20 means that Interconnection Customers and other interested parties will have to  
21 wait even longer to realize the benefits introduced by GIPR. The GIPR is the  
22 result of a successful stakeholder process, and in my opinion, it is imperative that  
23 the Commission approve the GIPR proposal in its entirety. If any component of

1           the GIPR proposal is substantially changed, it could jeopardize the success of its  
2           implementation.

3

4    **Conclusion**

5    **Q.    Does this conclude your testimony?**

6    **A.    Yes.**

UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION

California Independent System Operator ) Docket No. ER08-\_\_\_\_-000  
Corporation )

I, Stephen Rutty, declare under penalty of perjury, that the foregoing questions and answers labeled as my testimony were prepared by me, with the assistance of others working under my direction and supervision; and that the facts contained in my answers are true and correct to the best of my knowledge, information, and belief.

Executed at Folsom, California, on July 28<sup>th</sup>, 2008

  
\_\_\_\_\_  
Stephen Rutty

**Exhibit ISO-2**

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**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

California Independent System Operator )      Docket No. ER08-\_\_\_\_-000  
Corporation )

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**PREPARED DIRECT TESTIMONY  
OF  
ROBERT SPARKS**

**Introduction**

**Q. Please state your name and business address.**

**A.** My name is Robert Sparks. My business address is California Independent System Operator Corporation (CAISO), 151 Blue Ravine Road, Folsom, California 95630.

**Q. By whom and in what capacity are you employed?**

**A.** I am a Lead Regional Transmission Engineer in the Regional Transmission Department at the CAISO. One of my primary job responsibilities is to work with CAISO Participating Transmission Owners, State Agencies, and Stakeholders to create a comprehensive long- term transmission plan that is compatible with the long term resource plans of the load serving entities for California to ensure that facilities are in place as needed to economically provide wholesale electric service and to meet reliability criteria.

1 **Q. Please describe your professional and educational background.**

2 **A.** I received a Bachelor of Science degree in Electrical Engineering from California  
3 State University, Sacramento in June 1988 and a Master of Science degree in  
4 Electrical Engineering from Purdue University in August 1989. In 1989 I joined  
5 Pacific Gas and Electric Company's (PG&E) Transmission Planning Department  
6 and worked on California-Oregon Transmission Project design refinement studies,  
7 and QF interconnection studies. While in that position, I participated in writing  
8 "Cost-benefit analysis of power system reliability: two utility case studies" that  
9 was published in IEEE Transactions on Power Systems, August 1995. In 1994, I  
10 joined PG&E's System Operations Department, initially as a Lead Operations  
11 Engineer and later as a Supervising Power System Engineer. In November 1997,  
12 I joined the CAISO as a Grid Planning Engineer and performed the initial  
13 Reliability Must Run Study for the San Diego, Fresno, and Stockton RMR areas,  
14 and reviewed the Southern California Edison and PG&E transmission expansion  
15 plans. From December 2001 to August 2002, I worked for FPL Energy as the  
16 West Coast Transmission Manager for transmission related issues associated with  
17 their various generation projects in the WECC. I rejoined the CAISO in  
18 September 2002 as a Senior Grid Planning Engineer and was later promoted to a  
19 Lead Grid Planning Engineer. I have over 18 years experience in electric  
20 transmission system planning and operations and am a registered Professional  
21 Engineer in the State of California.

22



1 **Q. Please describe your role in the development of the Generation**  
2 **Interconnectino Process Reform (GIPR) proposal.**

3 **A.** I was responsible for the implementation of the CAISO's deliverability  
4 methodology associated with our Commission Order No. 2003 compliance.  
5 Because of my experience from that role, I was part of the GIPR design team, and  
6 provided overall transmission planning and generation deliverability analysis  
7 expertise.

8  
9 **Q. What is the purpose of your testimony?**

10 **A.** My testimony will discuss four important elements of the CAISO's GIPR  
11 proposal. First, I will discuss the decision to streamline the study process from  
12 three studies to two. Second, I will discuss the On-Peak and Off-Peak  
13 Deliverability Assessments included in the GIPR. Third, I will discuss the impact  
14 of the Clustering study approach on the allocation of costs to Interconnection  
15 Customers. Finally, I will discuss the CAISO's decision to create a stronger  
16 relationship between the generator interconnection process and the transmission  
17 planning process.

18

19

20

21

22

23

1 **Interconnection Studies**

2 **Q. Does the CAISO propose a change to the prior three study process,**  
3 **consisting of the Interconnection Feasibility Study, Interconnection System**  
4 **Impact Study, and Interconnection Facilities Study?**

5 **A.** Yes. Under the GIPR proposal the CAISO proposes to use only two studies, not  
6 three. These two studies are called the Phase I Interconnection Study and the  
7 Phase II Interconnection Study.

8  
9 **Q. Why did the CAISO decide to reduce from the number of transmission**  
10 **studies from three to two?**

11 **A.** As part of the proposed new process, the CAISO will make more information  
12 available to Interconnection Customers at the early stages of, and even throughout,  
13 the Interconnection Study process, which largely obviates the need for a separate  
14 Interconnection Feasibility Study. For example, all Base Cases and Contingency  
15 input files used during the Phase I and II Interconnection Studies, along with the  
16 study results, will be posted on the CAISO's secure website. This information  
17 will allow Interconnection Customers to assess the feasibility of their projects by  
18 reviewing the completed studies and/or by utilizing the Base Case models and  
19 performing their own preliminary analysis. The CAISO believes this new process  
20 can accomplish the same objectives as the three-study *pro forma* LGIP with only  
21 two studies. While the three-study approach, which included the Interconnection  
22 Feasibility Study, was appropriate and needed under a serial approach in order for  
23 generation projects to identify unexpected "lumpy" transmission projects for

1 which they would have sole responsibility, the move to a Clustering and Group  
2 Study-based approach mitigates this need because financial responsibility for  
3 transmission upgrades is shared by generation projects contributing to the  
4 transmissison project need. As an example of what is meant by a “lumpy”  
5 transmission project, when a generation project triggers the need for a new  
6 transmission line, most likely the capacity of that standard sized transmission line  
7 will exceed the incremental need of the generation project, but under the existing  
8 serial process the new generator must finance the entire cost of the line.

9

10 Also, eliminating one step in the interconnection process will lead to increased  
11 efficiencies in processing Interconnection Requests.

12

13 **Q. Will the absence of an Interconnection Feasibility Study impair the efficiency**  
14 **of load serving entities’ competitive solicitations?**

15 **A.** It might to a very limited degree, but I say this only because the CAISO will not  
16 be providing the results of the preliminary assessment to the utility and submitting  
17 generator on an objective third-party basis. As noted, instead of the CAISO  
18 performing the preliminary feasibility assessment for the interconnection, the  
19 CAISO will be providing information to potential generation developers and  
20 Market Participants to allow them to evaluate their own projects or those  
21 submitted as part of a solicitation process. In this regard, the CAISO believes this  
22 approach of allowing generation suppliers and buyers to assume greater  
23 responsibility for preliminary assessments is consistent with the Commission’s

1 direction in Docket No. RM07-01-000. The Notice of Proposed Rule in that  
2 docket proposes to allow transmission planning and procurement personnel of a  
3 utility to exchange information for planning purposes. This would permit the  
4 transmission planning side of a jurisdictional utility to perform studies on behalf  
5 of the procurement side of the utility to facilitate evaluation of requests for offers  
6 or other solicitations.

7  
8 Further, the CAISO has developed the Phase I Interconnection Study and the use  
9 of the Interconnection Study Deposit in a way that should also allow load serving  
10 entities some flexibility in structuring solicitations. For instance, the Phase I  
11 Interconnection Study will provide estimates of both Interconnection Facilities  
12 and Network Upgrades needed to interconnect all generators in a particular Queue  
13 Cluster Window. That information, which will be shared with Interconnection  
14 Customers prior to the Results Meeting, can be used to short list or select winners  
15 from the solicitation, and, if necessary, the Interconnection Customer can  
16 withdraw and mitigate its Interconnection Study Deposit exposure. Thus, as a  
17 general matter, load serving entities and participants in the solicitation will have  
18 approximately sixty (60) days before the level of refundability of the  
19 Interconnection Study Deposit changes.

20  
21 **Q. Is the purpose of these Phase I and Phase II Interconnection Studies different**  
22 **from the prior studies?**

1 A. No. The different names of these studies merely reflect the consolidation of the  
2 prior three studies into two. The fundamental purpose of these two studies is the  
3 same.

4 **Q. What is the purpose of the Phase I Interconnection Study?**

5 A. The purpose of the Phase I Interconnection Study is to make a preliminary, but  
6 detailed, determination of the transmission facilities that would be required to  
7 interconnect the generators in the study. The Phase I Interconnection Study will  
8 identify the need for Reliability Network Upgrades, Delivery Network Upgrades,  
9 and Interconnection Facilities. An On-Peak Deliverability Assessment evaluating  
10 summer peak conditions and a short circuit study will be conducted. The On-  
11 Peak Deliverability Assessment will identify thermal overloads at summer peak  
12 conditions that must be mitigated to allow the full capacity of the generator to  
13 reach the aggregate of CAISO load. The CAISO, working with the applicable  
14 Participating Transmission Owner(s) (PTOs), will, in performing the On-Peak  
15 Deliverability Assessment, identify Delivery Network Upgrades needed to ensure  
16 the deliverability status requested by the Interconnection Customer. The CAISO  
17 and the PTO(s) will also identify necessary Reliability Network Upgrades in  
18 performing short circuit and stability studies. Stability analyses will only be  
19 conducted as part of the Phase I Interconnection Study if the CAISO and/or  
20 PTO(s) have a reason to expect transient or voltage stability problems. The Phase  
21 I Interconnection Study will also include an off-peak reliability analysis to  
22 evaluate the conditions when congestion may be most severe and an Off-Peak

1 Deliverability Assessment for study areas with Location Constrained Resource  
2 Interconnection Generators with primarily off-peak production profiles.

3

4 **Q. Does the Phase I Interconnection Study have a parallel study under the**  
5 **Commission's *pro forma* LGIP?**

6 **A.** Not directly. The Phase I Interconnection Study is far more detailed than the  
7 Interconnection Feasibility Study conducted under the Commission's *pro forma*  
8 LGIP, so in that respect it is more akin to the Interconnection System Impact  
9 Study. The results of the Phase I Interconnection Study are important because the  
10 results of this study become the basis for the posting of Interconnection Financial  
11 Security. However, unlike the Interconnection System Impact Study, the  
12 transmission projects identified as needed in the Phase I Interconnection Study are  
13 not necessarily the ultimate transmission projects that will be constructed. This  
14 will be discussed in more detail below.

15

16 **Q. What is the purpose of the Phase II Interconnection Study?**

17 **A.** Under the GIPR proposal, after the outcomes of the Phase I Interconnection Study  
18 are discussed at the Results Meeting and after the requisite Interconnection  
19 Financial Security has been posted, the CAISO conducts the Phase II  
20 Interconnection Study. Only those Interconnection Customers that post their  
21 required Interconnection Financial Security will be eligible to participate in the  
22 Phase II Interconnection Study. The primary goals of the Phase II  
23 Interconnection Study are: (1) to update technical analyses for projects in the two

1 previous semi-annual clusters, *i.e.*, the two prior Phase I Interconnection Studies,  
2 to account for projects that have withdrawn; (2) develop a final plan of service for  
3 projects that remain from the two previous Phase I Interconnection Studies; (3)  
4 perform detailed engineering and cost estimates for the Interconnection Facilities  
5 and Network Upgrades; (4) determine plans of service segments to optimize in-  
6 service timing requirements based on operational studies; and (5) coordinate  
7 refinement studies, to the extent practicable, with studies conducted in the  
8 Transmission Planning Process (TPP). This latter purpose will be discussed  
9 further below. After a final plan of service is determined, Large Generator  
10 Interconnection Agreements (LGIAs) will be tendered to generators and executed  
11 to reflect actual Interconnection Facilities, Network Upgrade financing  
12 responsibilities, and any additional technical requirements for generators to  
13 actually go on-line.

14  
15 **Q. Does the Phase II Interconnection Study have a parallel study under the**  
16 **Commission's *pro forma* LGIP?**

17 **A.** The Phase II Interconnection Study combines some aspects of the Interconnection  
18 System Impact Study with the finality of the Interconnection Facilities Study. It  
19 operates like the Interconnection Facilities Study in several respects because it  
20 leads to the execution of an LGIA. However, as noted above, the Phase II  
21 Interconnection Study is conducted in concert with the CAISO's Transmission  
22 Planning Process and addresses multiple projects, so the similarities to the  
23 Interconnection Facilities Study are, to a certain degree, limited.

1

2 **Q. How does the GIPR proposal reduce or eliminate the need for restudies?**

3 **A.** GIPR reduces or eliminates the need for restudies by establishing cost certainty  
4 for Network Upgrades identified in the Phase I Interconnection Study and  
5 imposing additional financial obligations, based on the Phase I Interconnection  
6 Study outcomes, on Interconnection Customers, which must be met in order to  
7 proceed with the Phase II Interconnection Study. Interconnection Customers have  
8 the option to withdraw their projects prior to entering into the Phase II  
9 Interconnection Study and, therefore, it is presumed that those that do post their  
10 Interconnection Financial Security are more likely to complete the  
11 interconnection process. If Interconnection Customers do withdraw prior to  
12 beginning the Phase II Interconnection Studies, there will be no need to perform  
13 any restudies to reallocate the maximum responsibilities for Network Upgrade  
14 costs because those costs will be established by the Phase I Interconnection Study.  
15 Nor will the CAISO perform any restudies simply to determine whether an  
16 Interconnection Customer's financing obligation (within the maximum amount set  
17 forth by the Phase I Interconnection Study) identified after the Phase II  
18 Interconnection Study for a particular facility might change because of the  
19 withdrawal of one or more projects within the Group Study.

20

21 Nevertheless, the CAISO recognizes that reevaluation of prior Interconnection  
22 Studies may be prudent to the extent a sufficient volume of capacity from a prior  
23 Phase II Interconnection Study has withdrawn. However, even under this



1 scenario, the CAISO intends to mitigate the need for reassessment of the  
2 identified Network Upgrades by developing a plan of service for the Network  
3 Upgrades that is sufficiently flexible or tiered to accommodate changes in the  
4 anticipated volume of interconnected capacity or, given coordination with the  
5 TPP, useful for multiple system needs. If the effect on the planned Network  
6 Upgrades of withdrawals cannot be accommodated by the adopted flexible plan of  
7 service or by identifying other benefits of the transmission facilities, the CAISO  
8 will reassess the scope of the Network Upgrades in the next available TPP. The  
9 CAISO notes that any reassessment should not, to the maximum extent possible,  
10 delay the Commercial Operation Date of generating facilities that did not  
11 withdraw. The CAISO anticipates performing an operational study under LGIP  
12 Section 7.1 to maximize the ability of the affected Generating Facilities to meet  
13 intended Commercial Operation Dates notwithstanding potential modifications to  
14 the scope of previously identified Network Upgrades.

15

16 **On-Peak and Off-Peak Deliverability Assessments**

17 **Q. You mentioned the the On-Peak Deliverability Assessment. Could you**  
18 **explain what that is and its purpose?**

19 **A.** The goal of CAISO generator deliverability studies is to determine if the  
20 aggregate of generator capacity in a given area can be simultaneously transferred  
21 to the remainder of the CAISO Control Area. Any generators requesting  
22 interconnection to the CAISO Controlled Grid will be analyzed for

1 “deliverability” in order to ensure that the amount of capacity associated with the  
2 resource is deliverable when it is needed during resource shortage conditions.

3  
4 The CAISO Deliverability Assessment methodology is designed to ensure that  
5 facility enhancements and cost responsibilities can be identified in a fair and  
6 nondiscriminatory manner.

7 **Q. Is there an On-Peak Deliverability Assessment as part of the Phase II**  
8 **Interconnection Study and if so, how does it differ from that performed in**  
9 **the Phase I Interconnection Study?**

10 **A.** Yes. A deliverability study will be performed in the Phase II study using the  
11 same methodology as in the Phase I study. Although in the Phase II study the  
12 upgrades chosen to ensure the deliverability of the generation projects may be  
13 different for the reasons stated above, a deliverability study will be performed to  
14 demonstrate that Delivery Network Upgrades are still needed and that the  
15 upgrades proposed will ensure the deliverability of the generation that plans to  
16 interconnect. In addition, information obtained during the deliverability study is  
17 needed to determine financing cost allocations.

18  
19 **Q. How will wind and other intermittent resources be studied in the On-Peak**  
20 **Deliverability Assessment?**

21 **A.** Although a description of the methodology for assessing the deliverability of such  
22 resources was appropriately not included in the tariff, the CAISO proposes to post  
23 that methodology to the CAISO Website. However, many stakeholders raised

1 this issue during the GIPR development process. The Qualified Capacity of wind  
2 generation for purposes of the resource adequacy program administered by the  
3 California Public Utilities Commission is calculated as the average production of  
4 a wind resource between the hours of 12PM-6PM, during the months of May  
5 through September (QC period). In order to ensure the deliverability of this  
6 generation during this entire QC period, this generation will be modeled as  
7 dispatched at its minimum level during this QC period in the Base Case but can  
8 be increased to its maximum value within that QC period during the analysis. If  
9 the wind generation is electrically clustered with other types of generation, then  
10 the cumulative availability of this generation will determine how much the wind  
11 generation can be increased during the deliverability analysis. If the cluster  
12 consists of only wind generation (scenario 1), then it will be increased to the  
13 maximum production for that cluster during the QC period. If 20 or more non-  
14 wind generation units are in the cluster (scenario 2), then the wind generation will  
15 not be increased above its average output during the QC period. The maximum  
16 wind generation output level will be interpolated for clusters with a proportion of  
17 wind to non-wind generators in between the two scenarios above.

18

19 **Q. As part of the On-Peak Deliverability Assessment, the CAISO proposes to**  
20 **perform a sensitivity study that removes the “highest cost Delivery Network**  
21 **Upgrade,” but may, at its sole discretion, also perform a sensitivity study that**  
22 **removes any other identified Delivery Network Upgrades. Please explain the**  
23 **rationale behind this proposal.**

1 A. The purpose of this sensitivity study is to determine if there are any Delivery  
2 Network Upgrades that have been triggered that are clearly not cost effective, and  
3 provide information needed and an opportunity for Interconnection Customers to  
4 reduce the size of their projects to eliminate the need for such transmission  
5 upgrades. In many scenarios, the least cost-effective upgrade will be the highest  
6 cost upgrade. However, there may also be scenarios in which the least cost-  
7 effective upgrade is not the highest cost upgrade, and therefore, the CAISO is  
8 proposing to have the discretion to perform sensitivity studies that remove  
9 identified Delivery Network Upgrades other than the highest cost upgrades.

10

11 **Q. Why did the CAISO elect to include an Off-Peak Deliverability Assessment?**

12 A. A large portion of the generation under development that plans to interconnect to  
13 the CAISO Controlled Grid is wind generation. Wind generation has a  
14 production profile with large amounts of production during the off-peak period  
15 which occurs during hours when customer demand is lowest. While the On-Peak  
16 Deliverability Assessment will ensure that the wind generation can be delivered  
17 during the on-peak period, it is not an adequate test for ensuring the deliverability  
18 of the wind generation during the off-peak period. The Off-Peak Deliverability  
19 Assessment is intended to supplement the On-Peak Deliverability Assessment to  
20 ensure that generation with uncontrollable energy production profiles that include  
21 a substantial amount of production during the off-peak period will generally be  
22 deliverable during all periods of the year.

23

1 **Q. Why is the Off-Peak Deliverability Assessment performed only for those**  
2 **Interconnection Requests that also have selected Full Capacity Deliverability**  
3 **Status and therefore were also studied as part of the On-Peak Deliverability**  
4 **Assessment?**

5 **A.** As stated above, in order to ensure the deliverability of intermittent generation  
6 with production profiles that occur during all periods of the year, the CAISO  
7 proposes to test both the on-peak and off-peak periods. It is expected that these  
8 two assessments are the minimum that will be needed in order to cover all  
9 production periods. Testing only the off-peak production period would not be  
10 sufficient to ensure deliverability during all periods of the year.

11

12 **Cost Allocation Issues**

13 **Q. How does the use of the cluster study approach and the GIPR proposal**  
14 **impact the CAISO's ability to assign costs to the appropriate party?**

15 **A.** The serial study process was beneficial for its ability to assign transmission  
16 facility costs to a given Interconnection Request. This is because each  
17 Interconnection Request was studied sequentially, and with the limited purposes  
18 of ensuring the reliability and deliverability of the underlying Generating Facility.  
19 The clustering of Interconnection Studies and coordination with the TPP changes  
20 this analysis somewhat. Because under the GIPR many Interconnection Requests  
21 will be studied together, the CAISO will work with its PTOs to group the  
22 Interconnection Requests within a Queue Cluster Window into appropriate Group  
23 Studies. The CAISO and PTOs will develop the cost responsibility for the

1 Reliability and Delivery Network Upgrades and Interconnection Facilities for  
2 each Interconnection Customer assigned to a particular Group Study. As I noted  
3 earlier in my testimony, the Phase I Interconnection Study will identify the  
4 Delivery Network Upgrade cost allocation for capacity units based on the flow  
5 impact of the generation on the identified constraints and upgrades in a manner  
6 consistent with the CAISO's existing generation deliverability methodology.  
7 Allocation of Reliability Network Upgrade costs for both "Energy-only" and Full  
8 Capacity Deliverability Status units will be based on the original grouping and the  
9 MW capacity of the units in the group. The Phase I Interconnection Study will  
10 determine the maximum Network Upgrade cost responsibility, but specific  
11 financing responsibilities will be determined in the Phase II Interconnection Study  
12 after the final upgrades are identified, again based on the flow impact of the  
13 generation on the upgrades.

14

15 **Q. Is the GIPR proposal consistent with the Commission's approved method of**  
16 **cost allocation?**

17 **A.** Yes. The GIPR proposal does not change or depart from the Commission's  
18 fundamental cost responsibility paradigm for generator interconnections. That is,  
19 under GIPR, consistent with the CAISO's existing tariff provisions, the costs of  
20 Interconnection Facilities will be the responsibility of the Interconnection  
21 Customer, and the costs of Network Upgrades will be initially funded by the  
22 Interconnection Customer subject to later repayment either through direct  
23 payment by the PTO or through the allocation of Congestion Revenue Rights. As

1 under existing LGIP provisions, the PTO may elect to fund the Network Upgrades.  
2 During the GIPR development process, the CAISO supported assigning the PTOs  
3 the mandatory responsibility for financing Network Upgrades. The CAISO took  
4 this position based on two premises. First, that the potential loss of an  
5 Interconnection Customer's Interconnection Financial Security provided  
6 sufficient incentive for the interconnecting generator to proceed to Commercial  
7 Operation and therefore the financing obligation was unnecessary. Second, the  
8 CAISO ratepayers ultimately pay for the Network Upgrades through the CAISO  
9 transmission Access Charge (TAC), which collects the PTOs' Transmission  
10 Revenue Requirements. Some stakeholders noted that by assigning the  
11 responsibility directly to the PTOs, only the financing costs of the PTO, but not  
12 the Interconnection Customer, must be recovered by the TAC. Nevertheless, the  
13 CAISO ultimately rejected mandatory PTO financing because of legitimate PTO  
14 concerns regarding their ability to access sufficient capital to meet all potential  
15 upgrade obligations.

16

17 The CAISO believes that the GIPR financing approach is superior to that used  
18 under a serial approach because it will reduce the incentive for generators to drop  
19 out of the queue and will avoid "lumpy" transmission project costs. Also, it will  
20 result in a more equitable allocation of costs among Interconnection Customers,  
21 insofar as it will avoid the problem of assigning what might be prohibitive  
22 Network Upgrade costs for the first generator seeking to interconnect in a

1 particular area, while allowing subsequent projects to pay only nominal costs even  
2 though they will derive substantial benefits from the upgrades.

3

4 **Q. Is the method for determining which generator is responsible for certain  
5 Network Upgrades different under the GIPR proposal?**

6 **A.** It is different for the CAISO, but consistent with existing Commission precedent.  
7 Existing LGIP Section 4.1 provides that “[t]he cost of the common upgrades for  
8 clustered Interconnection Requests may be allocated without regard to queue  
9 position.” The CAISO has elected to provide more clarity regarding the cost  
10 allocation methodology given the GIPR’s reliance on Clustering. No longer will  
11 the CAISO determine cost responsibility for Network Upgrades for each  
12 generator as it did under the serial study approach, except where an  
13 Interconnection Request is studied separately from a Group Study. In that case,  
14 Reliability Network Upgrades will be assigned to the single Interconnection  
15 Customer. Otherwise, the estimated costs of Reliability Network Upgrades  
16 identified through a Group Study will be assigned to all Interconnection Requests  
17 in that Group Study *pro rata* on the basis of the maximum megawatt electrical  
18 output of each proposed new Large Generating Facility or the amount of  
19 megawatt increase in the generating capacity of each existing Generating Facility  
20 as listed by the Interconnection Customer its Interconnection Request. The  
21 CAISO, in coordination with the applicable PTOs, will perform an On-Peak  
22 Deliverability Assessment for Interconnection Requests selecting Full Capacity  
23 Deliverability Status. The On-Peak Deliverability Assessment will determine the



1 generating facility's ability to deliver its Energy to the CAISO Controlled Grid  
2 under peak load conditions, and identify preliminary Delivery Network Upgrades  
3 required to provide the Large Generating Facility with Full Capacity  
4 Deliverability Status. The estimated costs of Delivery Network Upgrades  
5 identified in the On-Peak Deliverability Assessment will be assigned to all  
6 Interconnection Requests selecting Full Capacity Deliverability Status based on  
7 the flow impact of each such Large Generating Facility on the Delivery Network  
8 Upgrades as determined by the Generation distribution factor methodology set  
9 forth in the On-Peak Deliverability Assessment methodology.

10

11 **Q. Why did the CAISO decide to limit an Interconnection Customer's liability**  
12 **for Network Upgrade costs to the extent of its Interconnection Financial**  
13 **Security, posted as a result of cost estimated? What happens if actual**  
14 **Network Upgrade costs exceed the earlier estimates and therefore the**  
15 **amount of the posted Interconnection Financial Security?**

16 **A.** The main reason underlying this decision was the CAISO's desire to provide  
17 generators with cost certainty. As noted in the testimony of Stephen Ruty,  
18 Interconnection Customers are being asked to commit greater financial resources  
19 to the interconnection process under the GIPR proposal. In exchange, the CAISO  
20 felt it was proper to provide Interconnection Customers with greater cost certainty  
21 than they have under the current interconnection procedures. This protection  
22 limits an Interconnection Customer's cost exposure for Network Upgrades even if  
23 projects from the same Queue Cluster Window withdraw. Naturally, there will be

1 times when the resulting plan of service determined in the Phase II  
2 Interconnection Study will be less than the Interconnection Customer's liability,  
3 in which case any excess amounts will be refunded to the customer. There will  
4 also be times when the cost of Network Upgrades that would normally be  
5 assigned to an Interconnection Customer exceeds the capped estimate provided  
6 that customer from the Phase I Interconnection Study. In these cases, the PTOs  
7 have agreed to take on that added risk and pay for the difference.

8

9 In addition, the predefined limit on the Interconnection Customer's cost  
10 responsibility allows flexibility during the design of the actual upgrades identified  
11 in the Phase II study. Without this flexibility, coordination with the TPP would  
12 be more limited. With the consideration of all objectives typically included in the  
13 TPP, as discussed in the section below describing the coordination of the Phase II  
14 Interconnection Study and the TPP, the CAISO may identify larger transmission  
15 projects to be built. These larger projects would be expected to reduce overall  
16 transmission ratepayer costs by eliminating multiple smaller projects with more  
17 specialized objectives, but the additional costs would need to be immediately paid  
18 for in a manner similar to other transmission projects in the TPP. In other words,  
19 by the applicable PTO.

20

1 **Transmission Planning Process and the GIPR**

2 **Q. Why did the CAISO decide to create a stronger link between the**  
3 **Transmission Planning Process and the generator interconnection process**  
4 **than exists currently?**

5 **A.** Under the current interconnection process, transmission upgrades needed for  
6 interconnection are identified, in large part, independently from transmission  
7 upgrades developed through the CAISO's annual Transmission Planning Process  
8 (TPP) conducted in accordance with Section 24 of its tariff. The GIPR enhances  
9 coordination between the CAISO's TPP and interconnection needs by managing  
10 the interaction between the Phase II Interconnection Study performed as part of  
11 the GIPR and the grid expansion studies performed as part of the TPP.

12

13 **Q. Could you explain generally what are the components or objectives of the**  
14 **Phase II Interconnection Study and the studies performed as part of the TPP?**

15 **A.** The primary objective of the Phase II study is to ensure that transmission facilities  
16 needed to ensure the reliability and deliverability of the interconnected generation  
17 are identified. The primary objective of the TPP is to ensure the overall reliability  
18 and efficiency of the CAISO Controlled Grid. The CAISO now proposes to  
19 consider the overall objectives of the TPP during the performance of the Phase II  
20 study. The idea is to meet multiple objectives with the same transmission projects  
21 and thereby reduce overall transmission costs. In other words, to capture  
22 opportunities to more efficiently design the transmission system and reduce the  
23 costs to ratepayers who ultimately pay for all of the Delivery Network Upgrades

1 identified in the Phase II study and in the TPP. Although the TPP already  
2 considers all objectives, obviously generation development assumptions are more  
3 certain during the performance of the Phase II study, and transmission projects  
4 primarily driven by generation interconnection needs, and secondarily by other  
5 transmission objectives, can most reasonably be moved forward during the Phase  
6 II study.

7

8 **Q. How will the GIPR study process interact with the CAISO's Order No. 890-**  
9 **compliant transmission planning process?**

10 **A.** Load forecast, planned network model, and planned resource assumptions will be  
11 consistent between the studies performed for the TPP and the GIPR Phase II study.  
12 Furthermore, Network Upgrade alternatives needed to ensure the reliability and  
13 deliverability of the new generation projects will also be designed, in the Phase II  
14 studies, with a consideration of other transmission need objectives such as service  
15 to transmission constrained load areas and congestion mitigation. Generation  
16 projects entering the GIPR Phase II study process will be considered as non-wires  
17 alternatives in the TPP studies, and conceptual transmission plans assessed during  
18 an earlier or in the concurrent TPP will be considered in the GIPR Phase II studies.  
19 In addition, transmission projects determined to be the preferred alternative  
20 during the Phase II studies that require CAISO Governing Board approval or a  
21 Certificate of Public Convenience and Necessity from the CPUC will go through  
22 the TPP stakeholder process. This interaction is diagramed in Appendix C of the  
23 GIPR proposal <http://www.caiso.com/1ff3/1ff3a8291c030.pdf>.

1 **Q. Why have you elected to separately identify the Phase II Interconnection**  
2 **Studies as opposed to simply stating that the TPP will identify Reliability**  
3 **Network Upgrades, Delivery Network Upgrades, and Interconnection**  
4 **Facilities for those proposed generation projects to be studied during the**  
5 **TPP process?**

6 **A.** Under GIPR, the Phase II Interconnection Studies will basically be part of the  
7 CAISO's TPP. The CAISO's TPP process is broken down into numerous  
8 assessments, so that each assessment is manageable. However, each of the  
9 assessments is performed using consistent assumptions and is coordinated. The  
10 Phase II studies will, essentially, be treated as another assessment included in the  
11 TPP.

12  
13 **Q. Can you describe how the Phase II Interconnection Study and TPP will be**  
14 **coordinated?**

15 **A.** This coordination will include, but not be limited to (i) inclusion, as a mitigation  
16 plan alternative for meeting both generation deliverability and reliability  
17 requirements, any conceptual transmission plan(s) developed, but not rejected, in  
18 the current or former TPP intended to access generation development areas or  
19 otherwise; (ii) promoting efficient transmission system design, to the extent  
20 possible, by identifying opportunities to meet both transmission needs identified  
21 in the current TPP and the need to ensure the reliability and deliverability of  
22 generation in the Phase II Interconnection Study; (iii) consideration in the Phase II  
23 study of future generation development potential in transmission upgrade designs;

1 and (iv) consideration of phased development and option value of transmission  
2 projects to address uncertainty. With regard to the last item, in many scenarios,  
3 more generation is expected to develop in an area at some point in the foreseeable  
4 future or other transmission needs are expected to occur, and it may be more  
5 efficient to design the transmission project to correspond with the ultimate needs  
6 anticipated. For example, building a higher capacity transmission line or routing  
7 it to more easily connect it to a future substation. The incremental cost, after  
8 factoring in uncertainty, may represent a prudent investment that can reasonably  
9 be expected to reduce overall costs in the longer term.

10 **Conclusion**

11 **Q. Does this conclude your testimony?**

12 **A. Yes.**

UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION

California Independent System Operator    )  
Corporation                                    )

Docket No. ER08-\_\_\_\_-000

I, Robert Sparks, declare under penalty of perjury, that the foregoing questions and answers labeled as my testimony were prepared by me, with the assistance of others working under my direction and supervision; and that the facts contained in my answers are true and correct to the best of my knowledge, information, and belief.

Executed at Folsom, California, on July 28<sup>th</sup>, 2008

  
Robert Sparks

**Exhibit ISO-3**



# Memorandum

**To:** ISO Board of Governors  
**From:** Stephen Ritty, Manager, Grid Assets  
Dennis Peters, Manager, External Affairs  
Karen Edson, Vice President of External Affairs  
**Date:** July 1, 2008  
**Re:** **Decision on Generator Interconnection Process Reform Proposal**

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***This memorandum requires Board action.***

## **Executive Summary**

California is at the forefront of a global challenge to reduce dependence on fossil fuels and greenhouse gas emissions. A central component of the state's multi-faceted effort to achieve these objectives is the adoption of a 20% Renewable Portfolio Standard (RPS), consideration of increasing the RPS to 33%, and adoption of a required reduction of greenhouse gas emissions to 1990 levels by 2020. Generators have responded vigorously. Today, 361 interconnection requests totaling more than 105,000 MW are pending in the CAISO interconnection study process. Of these, over 68,000 MW are from renewable resources. These requests far exceed the historic peak demand of 50,270 MW for the entire CAISO Balancing Authority Area and also exceed the ability of current CAISO interconnection procedures to efficiently process the requests.

CAISO administers the interconnection process in coordination with Participating Transmission Owners (PTOs) under largely *pro forma* procedures prescribed by the Federal Energy Regulatory Commission (FERC). The purpose is to ensure the safe and non-discriminatory interconnection of new generation to the CAISO Controlled Grid. The procedures call for evaluating the needs of each interconnection request in the order received, i.e., a serial study approach, and impose the cost of needed transmission upgrades on the first project that triggers a need for new facilities. At the same time, if a project ahead of others in the interconnection "queue" drops out and the change impacts others in line, the CAISO must restudy the affected projects. In addition, an application fee of only \$10,000 contributes to the number of interconnection requests, as do milestones that fail to provide a measure of commercial vitality.

The CAISO developed the Generator Interconnection Process Reform (GIPR) proposal to address these issues. The GIPR resolves the source of the backlog and other procedural flaws by increasing the financial commitment necessary for project developers to enter and progress through the interconnection process, studying projects with related system impacts in groups, and providing for pro-rata allocation of transmission upgrades across grouped projects. With these and other changes, CAISO will have greater confidence that the projects being studied are commercially viable and will be able to study projects more efficiently. At the same time, project developers will have greater certainty about the timing of interconnection studies and their share of interconnection costs.

More specifically, the GIPR proposes to achieve these objectives by:

1. **Expediting Consideration of a Manageable Number of "Late Stage" Interconnection Requests Under Current Rules.** The GIPR, in conjunction with the CAISO's Waiver Petition filed with FERC on May 15, 2008, as discussed below, will allow the CAISO and PTOs to narrow the number of interconnection requests subject to the current serial study approach to a manageable set of "late stage" interconnection requests.<sup>1</sup> By focusing their resources on this more limited serial study group, the CAISO and PTOs will be able to accelerate evaluation of approximately 90 interconnection requests, totaling over 23,000 MW, including over 12,000 MW of renewable resources. The CAISO anticipates substantially completing the interconnection process by October 2008 for these late stage interconnection requests and thereby facilitate the timely interconnection of generation projects that include those with existing and pending power purchase agreements and those seeking interconnection to approved portions of the Tehachapi Transmission Project.
2. **Adopting a More Efficient Group Study Approach.** The GIPR replaces the CAISO's current serial study approach with a more efficient "group study" or "clustering" approach for pending and future interconnection requests. By utilizing group studies, the CAISO and PTOs can more expeditiously evaluate the large volume of interconnection requests to clear the backlog by calendar year 2010, which is likely several years earlier than under the serial study approach.
3. **Imposing Greater Developer Commitment to Reduce the Number of Pending and Future Interconnection Requests.** The GIPR seeks to reduce the backlog and encourage interconnection requests that more closely resemble system needs by increasing the level of developer financial commitment to participate in the interconnection process. The GIPR requires greater upfront payments from project developers to initiate the interconnection process as well as creates additional financial exposure for withdrawal of the project from the process prior to the new generating facility becoming operational. Under the current process, the project developer can suspend its project and avoid financing any network upgrades during the period of suspension. The GIPR eliminates this possibility. However, a fundamental challenge posed by the reform process was to avoid dampening legitimate generation development that could result from increasing the financial commitment of interconnection customers without accounting for the inherent and inevitable uncertainty of generation development. Through the stakeholder process, the CAISO addressed this risk by incorporating various "off-ramps" that allow interconnection customers to exit the process and thereby mitigate their financial exposure.
4. **Facilitating Investment by Providing Process and Cost Certainty.** The GIPR corrects inefficiencies in the serial study process by providing developers with greater certainty with respect to study timelines and their ultimate responsibility to finance needed transmission upgrades. Unlike the current approach, where cost responsibility may change, even after the execution of an interconnection agreement,

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<sup>1</sup> On March 20, 2008, FERC issued an order providing transmission providers guidance regarding revisions to their interconnection procedures. In that order, FERC admonished that reforms affecting pending interconnection requests in "later stages of the process create special circumstances that require careful consideration" because of the greater potential for such reforms to "significantly disrupt" activities taken by late stage interconnection requests in reliance on the existing process. (See "Order on Technical Conference," *Interconnection Queuing Practices*, 122 FERC ¶61,252 (2008) (March 20 Order).)

depending on decisions made by other interconnection customers, generation developers will be assigned a maximum cost assignment that will not vary whether or not other projects withdraw.

5. **Promoting Greater Efficiency in Transmission Planning.** Under the current interconnection process, transmission upgrades needed for interconnection are identified, in large part, independently from transmission upgrades developed through the CAISO's annual transmission planning process. The GIPR enhances coordination between the CAISO's transmission planning process and interconnection needs.

The GIPR was the subject of a March 2008 briefing to the Board and this memorandum builds from that prior briefing by addressing in greater detail the foregoing issues. In particular, this memorandum will describe (1) the current interconnection queue and the problems that prompted the reform effort; (2) a summary of the GIPR and how its elements achieve the stated objectives; and (3) other salient GIPR elements of particular interest. It also includes a motion requesting Board approval of the GIPR and authorizing CAISO management to prepare tariff language consistent with the GIPR for FERC review.

Finally, the memorandum includes two attachments: (1) Attachment A – schedule of stakeholder activities and (2) Attachment B – response to stakeholder comments.

## **MOTION**

***Moved, that the ISO Board of Governors approves the Generation Interconnection Process Reform (GIPR) proposal as outlined in the memorandum dated July 1, 2008 and related attachments; and***

***Moved, that the ISO Board of Governors authorizes Management to make all the necessary and appropriate filings with the Federal Energy Regulatory Commission to implement the GIPR proposal.***

### **1. Background**

#### **A. Challenges Affecting the CAISO's Current Interconnection Procedures**

The foundation of the CAISO's current generation interconnection process was established by FERC in Order No. 2003 and its progeny. The Order No. 2003 interconnection procedures used by the CAISO and other transmission providers across the country have been successful in assuring open transmission access for new generation resources. However, several factors, largely unanticipated at the time of Order No. 2003's adoption, have imposed significant challenges to the efficiency of the present interconnection study approach. The most notable of these is the proliferation of interconnection requests for renewable generation in transmission constrained areas. The large number of requests and high level of capacity in the interconnection queue have overwhelmed available resources, led to delays and frustration with the study process, and exposed, or reinforced, fundamental deficiencies in the current serial or "first-in, first-out" study approach. Other ISOs and RTOs with significant renewable generation potential within their footprints are experiencing similar burdens on their interconnection processes.

The delays and uncertainties arise because of the general interdependence or incremental nature of each project's serial interconnection study. Under the current process, a project's system impacts and transmission upgrade requirements build from those identified for projects higher in the queue. Thus, when a project higher

in the queue drops out, all projects with a lower queue position must generally be restudied, which takes time and frequently changes the scope and cost of transmission upgrades assigned to the restudied project. The costs change because the upgrades needed to interconnect the higher queued project are now assigned to the next interconnection project that triggers the need for the upgrades.

Under such circumstances, and given the "lumpy" nature of transmission investment, a single interconnection request is often assigned significant costs for transmission upgrades that will also benefit other lower queued projects. This creates an incentive for projects to withdraw or suspend their expected on-line date. The frequency of restudies leads to long processing time for individual projects and to changing, and therefore uncertain, potential cost exposure for project developers.

In response to the concerns raised by the CAISO and others, FERC directed the CAISO and other transmission providers in its March 20 Order to engage in a stakeholder process to evaluate possible interconnection reforms for a potential late spring filing with FERC. The GIPR represents CAISO compliance with FERC's directive.

## **B. CAISO Tariff Waiver Filing to Facilitate GIPR Implementation**

On May 15, 2008, the CAISO filed with FERC a petition for a one-time waiver of limited provisions of the existing CAISO tariff governing generator interconnection (Waiver Petition). The central purpose of the Waiver Petition was to temporarily suspend interconnection study obligations and timelines with respect to specific pending and future interconnection requests. Although the scope of the Waiver Petition was narrow, it engendered significant controversy because it operated as a precursor to dividing pending interconnection requests into two groups – a "serial study group," as noted above, which would be processed under the existing procedures and financial rules and a "Transition Cluster," which would be subject to the temporary suspension and subsequently the new GIPR requirements.

The Waiver Petition was therefore structured to achieve two goals. First, the creation of the serial study group complied with FERC guidance in its March 20 Order. In that order, FERC cautioned that reforms affecting pending interconnection requests in "later stages of the process create special circumstances that require careful consideration" because of the greater potential for such reforms to "significantly disrupt" activities taken by late stage interconnection requests in reliance on the existing process. The CAISO elected to define late stage interconnection requests and therefore the serial study group as those interconnection requests that either (1) had met specific advanced milestones in the current LGIP interconnection study process, (2) had a power purchase agreement approved, or pending approval, by the CPUC or Local Regulatory Authority, or (3) were next in queue order to interconnect to any transmission project that has received land use approvals from any local, state, or federal entity, as applicable, up to the capacity studied by the CAISO.

Second, a core objective of the GIPR is to clear the existing backlog of interconnection requests. By suspending the interconnection requests in the Transition Cluster, the CAISO and its PTOs could focus resource on completing studies for those interconnection requests in the serial study group and, equally important, ensure that the GIPR procedures applied to the maximum number of pending interconnection requests. At this time, FERC has not ruled on the Waiver Petition, but the CAISO anticipates a ruling prior to the Board meeting.

## **2. General Description of the GIPR**

The CAISO has improved the interconnection process by incorporating into the GIPR several key features, including:

- Organizing the timing of interconnection requests by using pre-determined Queue Cluster Windows
- Studying electrically related interconnection requests as a group and identifying transmission upgrades needed for interconnection in coordination with the CAISO's transmission planning process
- Providing developers with financial certainty by establishing a "cap" on transmission cost responsibility
- Promoting commercially viable projects by increasing developer financial commitment, while accommodating development uncertainty

#### **A. Study Process Improvements – Queue Cluster Windows and Grouping**

The GIPR abandons a project-by-project study approach in favor of studies that group together electrically related proposed generation projects that submit their interconnection requests during two "Queue Cluster Windows" that occur during two preset four month periods each calendar year. Under the GIPR, the CAISO will perform two studies, rather than the current three studies - Phase I Interconnection Studies and Phase II Interconnection Studies.

The Phase I Interconnection Study will serve to preliminarily identify Network Upgrades and Interconnection Facilities needed for all interconnection requests submitted during the Queue Cluster Window to safely interconnect to the CAISO Controlled Grid. CAISO conducts the Phase I Interconnection Study to establish the basis to assign to each individual interconnection customer cost responsibility for the needed facilities. However, unlike the serial study approach where all costs were assigned to the project that triggered the need for the upgrade and could change over time if a higher queued project withdrew, under the Phase I Interconnection Study, costs will be allocated to interconnection customers on a more equitable basis and that cost responsibility will remain unchanged regardless decisions by other interconnection customers to withdraw or not. For Reliability Network Upgrade, which are those basic upgrades needed solely to ensure the integrity of the grid, the costs will be assigned pro rata to each interconnection customer based the size of the proposed generating facility. For Delivery Network Upgrades, which are upgrades needed to remove transmission constraints under peak load conditions, the costs are assigned based on the electrical impact each proposed new generating facility will have on the new transmission upgrade.

The Phase II Interconnection Study, which develops and plans the actual network transmission upgrades necessary to accommodate the interconnection requests, is coordinated with the CAISO's transmission planning process. By coordinating interconnection with transmission planning, the CAISO promotes better integration between interconnection processes and general transmission planning in an effort to identify transmission investment that meets multiple system needs, such as reliably serving load and interconnecting generation.

#### **B. Balances Additional Developer Financial Commitment with Cost Certainty**

The CAISO seeks to correct distortions impairing the existing process that result from the low barriers to queue entry and the ability for customers to keep a queue position with little or no effort toward achievement of meaningful milestones. The GIPR proposes to address these defects by increasing financial commitments and consequences throughout the interconnection process in an effort to realize more realistic outcomes that match system needs. In exchange, the GIPR Interconnection Phase I Study establishes a "cap" on the interconnection customer's financial commitment. By establishing a cost cap, the GIPR addresses the cost uncertainty that has resulted from restudies under the serial study approach. The cost certainty provided by the GIPR is intended to enhance developer investment decisions and facilitate project financing. Only interconnection customers that accept their cost responsibility assigned through the Phase I Interconnection

Study by posting specified financial security will be allowed to proceed to the Phase II Interconnection Study. The Phase II Interconnection Study identifies the actual transmission upgrades needed to interconnect the interconnection requests. . Because the specific additional developer commitments have been the source of considerable stakeholder discussion, they are set forth below.

- Advance and increase study deposits. The interconnection customer must make a \$250,000 deposit to cover costs of processing the request and conducting studies. Under the current three study process, the aggregate study deposits total \$170,000. Presently, interconnection customers are responsible only for actual costs incurred. In contrast, portions of the GIPR study deposits become non-refundable as the process moves forward. However, upon execution of an Interconnection Agreement (IA), the deposit net any administrative and study costs incurred will be fully refunded. The purpose of the financial consequences embedded in the GIPR study deposit structure is to focus developers on their most promising opportunities.
  - In response to stakeholder comments, the CAISO will allow projects of less than 20 MW, but still subject to the GIPR, and capacity increases to existing generating facilities of less than 20 MW to submit a reduced study deposit of \$100,000.
  - Several stakeholders claimed that the proposed general study deposit amount discriminated against small developers or projects and would thereby inhibit healthy competition. An alternative proposal was to establish "tiered" deposits depending on the size of the generator. While the CAISO has accommodated certain small projects, as noted above, the CAISO elected not to follow this approach for several reasons. First, the CAISO has not identified a correlation between the size of the project and its study costs. Second, information from other regulatory entities indicates that the deposit amount is reasonable given the financial resources available to most viable developers.
- Advance the requirement for proof of Site Control or submission of an increased deposit in lieu of Site Control. Currently, if an interconnection customer does not demonstrate proof of site control with its application, it may post a deposit of \$10,000. The GIPR increases that deposit to \$250,000. This amount would be refundable upon proof of site control or if the interconnection customer withdraws.
- Posting of Security and Schedule for Non-refundability. Under current interconnection rules, an interconnection customer is not required to provide financing for transmission upgrades associated with its project until construction of those facilities begins in accordance with a schedule set forth in the interconnection agreement; however, the interconnection customer may suspend construction activity for up to three (3) years. To the extent the transmission upgrades are Network Upgrades, the interconnection customer will be entitled to reimbursement from the PTO of those costs over a five (5) year period once the generating facility comes online. The PTO then recovers those costs through the CAISO's Access Charge assessed to load within the CAISO Balancing Authority Area. The GIPR changes the current rules by requiring the interconnection customer to post security in an amount equal to 20% of the total cost responsibility of the estimated cost of Network Upgrades and Interconnection Facilities determined by the Phase I Interconnection Study. The remaining 80% of the estimated costs must be posted within six (6) months following the conclusion of the Phase II Interconnection Study. Over time, a portion of the posted security becomes non-refundable, except as described below.

- Use of Other Study Limitations: To the extent these revisions to the financial requirements for interconnection are insufficient to reduce the studied projects to a reasonable quantity of capacity, the CAISO intends to utilize information produced by the Renewable Energy Transmission Initiative (RETI) to properly limit development assumptions. RETI is a collaborative study effort among California stakeholders, including the CAISO, that will identify and quantify the development potential of "competitive renewable energy zones." The purpose of using the RETI information is to ensure that the CAISO's analytical tools will produce results that provide optimal transmission systems, and that the cost outcomes of the interconnection studies better reflect the size of the network upgrades likely to be necessary to access the developable quantity of capacity in particular renewable energy regions.

To the extent security or deposits provided by interconnection customers are surrendered to the CAISO under the foregoing, the CAISO intends to distribute any such proceeds to Scheduling Coordinators in a manner similar to the disposition of penalties collected by the CAISO for violations of its Enforcement Protocols under Section 37 of the CAISO Tariff. In general, Scheduling Coordinators will receive amounts in proportion to their contribution to the Grid Management Charge. Several stakeholders suggested that the interconnection customer originally responsible for the surrendered funds should receive Merchant Transmission Congestion Revenue Rights. However, given that the proceeds of any surrendered security or deposits are not going directly to finance transmission investment, the CAISO has not incorporated this element into the GIPR.

- **Addressing Development Risk**

As noted above, the CAISO recognized that the potential to chill legitimate generation development could occur if the increased financial commitments incorporated in the GIPR failed to acknowledge the inherent uncertainty of project development. Much of this uncertainty results from processes that are independent of the CAISO's interconnection procedures and even outside the control of developers. The most significant of these processes involve load serving entity procurement cycles and solicitations and land using permitting proceedings. The GIPR accounts for uncertainty from such factors and moderates developer risk by allowing for specific off-ramps at several points in the interconnection process.

- Recovery of Unused Study Deposits. While study deposits are generally non-refundable, a project that withdraws from the process within 30 days of the initial meeting to discuss the viability of the project may recover its full deposit less actual costs. In addition, the full amount of the deposit becomes non-refundable only after the results of the Phase I Interconnection Study are communicated to the interconnection customer. Prior to that time, only \$100,000 of the deposit is at risk. Thus, the GIPR includes incentives for interconnection customers to closely scrutinize the quality of a particular project throughout the study process.
- Refundability of Security. As noted above, interconnection customers must post 20% of their assigned costs of Network Upgrades and Interconnection Facilities prior to the Phase II Interconnection Study and 100% of such costs within six months after the conclusion of the Phase II Interconnection Study. This structure is intended to balance the goal of increasing the financial commitment of developers to encourage realistic participation in the interconnection process with the inherent uncertainties of project development. The staggered posting requirement was incorporated into the GIPR by stakeholders to facilitate the ability of interconnection customers to obtain financing as well as to defer such financial commitment until after the interconnection customer may have a better understanding of the outcome of pending request for offers or other licensing proceedings. Moreover, the GIPR has proposed refunding a portion of the posted amounts upon the occurrence of specified events outside the interconnection customer's control, such as the denial of a CEC license, the inability to obtain an

accepted power purchase agreement, or an unanticipated increase in the cost of Interconnection Facilities based on transmission planning outcomes.

### **C. Other Areas of Interest**

In order to prepare the Board for issues that may arise from stakeholder comments, the CAISO addresses several other topics at issue during the stakeholder process.

- **Accelerated Study Process**

Several stakeholders advocated that the CAISO have the ability to accelerate certain projects through the interconnection process under pre-defined circumstances. In other words, an interconnection request that is entitled to acceleration would not have to wait for the outcome of the grouped Phase I and Phase II Interconnection Studies, but rather could proceed to be studied individually on an independent timeframe. GIPR incorporates this concept. The goal is to allow interconnection requests that are independent of others, and therefore not part of a group study, or those that seek to interconnect to available transmission approved by the CAISO and appropriate state agencies, to proceed through the interconnection process in a manner that ensure the project will achieve its desired online date. In this regard, the CAISO believes that the GIPR timelines generally ensure timely interconnection. Accordingly, to qualify for the accelerated study process, in addition to the above requirements, the interconnection customer would also have to demonstrate that the GIPR timelines cannot accommodate its desired online date.

- **Elimination of Feasibility Study**

Several stakeholders, representing both generation developers and buyers, expressed a desire for some type of preliminary screening assessment information, which would be similar to today's Interconnection Feasibility Study. The proponents anticipate that such an assessment will provide the interconnection customer with interconnection information to assist in project development and also provide LSEs with transmission information to support resource procurement processes.

The CAISO rejected this proposal based on several considerations. First, depending on the definition of the assessment's scope, the impact on CAISO and PTO resources may be significant and potentially affect the ability to meet other, more formal, interconnection timelines associated with the GIPR. Second, FERC has on open proceeding to allow transmission planning and procurement personnel of a utility to exchange information for planning purposes. This would allow the transmission planning side of PTOs to perform studies on behalf of the procurement side of the utility to facilitate requests for offers or other solicitations. In this regard, the CAISO commits in the GIPR to provide updated basecase information to market participants and generation developers during multiple points in the GIPR process in order to allow parties to use current information to assess the feasibility of potential generation projects. By providing current data, the CAISO this will allow evaluation of potential generation projects using as current data

### **MANAGEMENT RECOMMENDATION**

Management recommends that the CAISO Board of Governors authorize final development, and filing with FERC, of CAISO Tariff language consistent with the GIPR proposal described herein. The CAISO and



stakeholders collaborated on developing the GIPR and many, albeit not all, of the objectives and elements of the GIPR are the product of substantial stakeholder input. The CAISO by moving forward with the GIPR will proactively address the existing backlog of interconnection requests and other procedural flaws in the interconnection process. In addition, the GIPR will promote the timely interconnection of new generating capacity from conventional and renewable resources needed to meet future customer demand and to achieve state environmental policy goals.

## **ATTACHMENT A**

### **Schedule of Stakeholder Activities**

The schedule for stakeholder activities and review of the GIPR are as follows:

January 18, 2008 CAISO posts Issues Identification Paper  
January 25, 2008 Stakeholder Meeting  
January 31, 2008 Stakeholder comments submitted  
February 12, 2008 CAISO posts Draft Proposal

February 19, 2008 Stakeholder Meeting  
February 26, 2008 Stakeholder comments submitted  
February 28, 2008 Stakeholder Conference Call

March 12, 2008 CAISO posts Revised Draft Proposal  
March 13, 2008 Stakeholder Conference Call  
March 20, 2008 Stakeholder Conference Call  
March 26, 2008 CAISO Board of Governors Presentation (informational)  
March 27, 2008 Stakeholder Conference Call

April 8, 2008 CAISO announces opening of Cluster Window on June 2, 2008  
April 9, 2008 Stakeholder Conference Call  
April 21, 2008 Status Report Filed with FERC

May 5, 2008 CAISO posts Revised Draft GIPR Proposal  
May 8, 2008 Stakeholder Conference Call  
May 15, 2008 CAISO file Waiver Request at FERC  
May 21, 2008 CAISO posts Revised Draft GIPR proposal  
May 28, 2008 Stakeholder Conference Call  
May 30, 2008 CAISO posts draft GIPR Tariff language revisions

June 2, 2008 First GIPR Queue Cluster Window opened  
June 6, 2008 Stakeholder comments submitted  
June 10, 2008 Stakeholder Meeting  
June 17, 2008 Stakeholder GIPR Tariff language comments received  
June 19, 2008 Stakeholder Conference Call  
June 24-27, 2008 CAISO posts updated GIPR Tariff revisions  
July 1, 2008 Stakeholder Meeting re GIPR Tariff language  
July 8, 2008 Stakeholder final GIPR Tariff comments due  
July 9, 2008 GIPR proposal taken to CAISO Board of Governors  
Mid July GIPR tariff language submitted to FERC for approval (if approved by CAISO Board of Governors)

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

**California Independent System     ) Docket No. ER08-\_\_\_\_-000  
Operator Corporation             )**

**CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION  
GENERATION INTERCONNECTION PROCESS REFORM  
TARIFF AMENDMENT**

**VOLUME 2 OF 4**

**CLEAN TARIFF SHEETS**

**July 28, 2008**

**Attachment A1 – Clean Sheets**

**Generation Interconnection Process Reform Amendment Filing**

**Currently Effective CAISO Tariff**

geographically located.

**24.8 Ownership of and Charges for Expansion Facilities.**

**24.8.1** All transmission additions and upgrades constructed in accordance with this Section 24 shall form part of the ISO Controlled Grid and shall be operated and maintained by a Participating TO in accordance with the Transmission Control Agreement.

**24.8.2** Each Participating TO that owns or operates transmission additions and upgrades constructed in accordance with this Section 24 shall provide access to them and charge for their use in accordance with this ISO Tariff and its TO Tariff.

**24.9 Expansion by “Local Furnishing” Participating TOs**

Notwithstanding any other provision of this ISO Tariff, a Local Furnishing Participating TO shall not be obligated to construct or expand facilities, (including interconnection facilities as described in Section 8 of the TO Tariff) unless the ISO or Project Sponsor has tendered an application under FPA Section 211 that requests FERC to issue an order directing the Local Furnishing TO to construct such facilities pursuant to Section 24 of the ISO Tariff. The Local Furnishing TO shall, within 10 days of receiving a copy of the Section 211 application, waive its right to a request for service under FPA Section 213(a) and to the issuance of a proposed order under FPA Section 212(c). Upon receipt of a final order from FERC that is no longer subject to rehearing or appeal, such Local Furnishing TO shall construct such facilities in accordance with this Section 24.

**25 INTERCONNECTION OF GENERATING UNITS AND GENERATING FACILITIES TO THE ISO CONTROLLED GRID.**

**25.1 Applicability.**

This Section 25 and Appendix U (the Standard Large Generator Interconnection Procedures (LGIP)), Appendix GG (the LGIP for Interconnection Requests in a Queue Cluster Window), Appendix AA (the Small Generator Interconnection Procedures (SGIP)), or Appendix W, as applicable, shall apply to:

- (a) each new Generating Unit that seeks to interconnect to the ISO Controlled Grid;
- (b) each existing Generating Unit connected to the ISO Controlled Grid that will be modified with a

resulting increase in the total capability of the power plant;

(c) each existing Generating Unit connected to the ISO Controlled Grid that will be modified without increasing the total capability of the power plant but has changed the electrical characteristics of the power plant such that its re-energization may violate Applicable Reliability Criteria; and

(d) each existing Qualifying Facility Generating Unit connected to the ISO Controlled Grid whose total Generation was previously sold to a Participating TO or on-site customer but whose Generation, or any portion thereof, will now be sold in the wholesale market, subject to Section 25.1.2 below.

**25.1.1** The owner of a Generating Unit described in Section 25.1 (a), (b), or (c), or its designee, shall be an Interconnection Customer required to submit an Interconnection Request and comply with Appendix U (the LGIP), Appendix GG (the LGIP for Interconnection Requests in a Queue Cluster Window), Appendix AA (SGIP), or Appendix W, as applicable, which applicability shall be based on the maximum rated capacity of the new total capability of the power plant, including the capability of all multiple energy production devices at a site, consistent with Section 4.10 of the SGIP.

**25.1.2** If the owner of a Qualifying Facility described in Section 25.1(d), or its designee, represents that the total capability and electrical characteristics of the Qualifying Facility will be substantially unchanged, then that entity must submit an affidavit to the ISO and the applicable Participating TO representing that the total capability and electrical characteristics of the Qualifying Facility will remain substantially unchanged. If there is any change to the total capability and electrical characteristics of the Qualifying Facility, however, the affidavit shall include supporting information describing any such changes. The ISO and the applicable Participating TO shall have the right to verify whether or not the total capability or electrical characteristics of the qualifying facility have changed or will change.

**25.1.2.1** If the ISO and the applicable Participating TO confirm that the electrical characteristics are substantially unchanged, then that request will not be placed into the interconnection queue. However, the owner of the Qualifying Facility, or its designee, will be required to execute a Standard Large Generator Interconnection Agreement in accordance with Section 11 of Appendix U (the LGIP), a Large Generator Interconnection Agreement in accordance with Section 11 of Appendix GG (the LGIP for Interconnection Requests in a Queue Cluster Window), a Small Generator Interconnection Agreement in accordance with Section 3.3.4, 3.4.5, or 3.5.7 and Section 4.8 of the SGIP, or an interconnection agreement in accordance with Appendix W, as applicable.

**25.1.2.2** If the ISO and the applicable Participating TO cannot confirm that the total capability and electrical characteristics are and will be substantially unchanged, then the owner of the Qualifying Facility, or its designee, shall be an Interconnection Customer required to submit an Interconnection Request and comply with Appendix U (the LGIP), Appendix GG (the LGIP for Interconnection Requests in a Queue Cluster Window), Appendix AA (the SGIP), or Appendix W, as applicable.

**25.2 Interconnections to the Distribution System.**

Any proposed interconnection by the owner of a planned Generating Unit, or its designee, to connect that Generating Unit to a Distribution System of a Participating TO will be processed, as applicable, pursuant to the Wholesale Distribution Access Tariff or CPUC Rule 21, or other Local Regulatory Authority requirements, if applicable, of the Participating TO; provided, however, that the owner of the planned Generating Unit, or its designee, shall be required to mitigate any adverse impact on reliability of the ISO Controlled Grid consistent with Appendix U (the Standard Large Generator Interconnection Procedures) and Appendix GG (the LGIP for Interconnection Requests in a Queue Cluster Window). In addition, each Participating TO will provide to the ISO a copy of the system impact study used to determine the impact of a planned Generating Unit on the Distribution System and the ISO Controlled Grid pursuant to a request to interconnect under the applicable Wholesale Distribution Access Tariff or CPUC Rule 21, or other Local Regulatory Authority requirements, if applicable.

**25.3 Maintenance of Encumbrances.**

No new Generating Unit shall adversely affect the ability of the applicable Participating TO to honor its Encumbrances existing as of the time an Interconnection Customer submits its Interconnection Request to the ISO. The applicable Participating TO, in consultation with the ISO, shall identify any such adverse effect on its Encumbrances in the Interconnection System Impact Study performed under Section 7 of Appendix U (the LGIP), the Phase I Interconnection Study performed under Section 6 of Appendix GG (the LGIP for Interconnection Requests in a Queue Cluster Window), the system impact study performed under Section 3.4 of the SGIP, or the System Impact Study performed under Section 5.1 of Appendix W, as applicable. To the extent the applicable Participating TO determines that the connection of the new Generating Unit will have an adverse effect on Encumbrances, the Interconnection Customer shall mitigate such adverse effect.

**26 TRANSMISSION RATES AND CHARGES.**

**26.1 Access Charges.**

All Market Participants withdrawing Energy from the ISO Controlled Grid shall pay Access Charges in accordance with this Section 26.1 and Appendix F, Schedule 3, except as provided in SPP 4.1. Prior to



more Scheduling Points. A closed loop of Energy Schedules that includes a transmission segment on the Pacific DC Intertie shall not be a Circular Schedule because such a Schedule directly changes power flows on the network and can mitigate Congestion between SP15 and NP15. This definition of a Circular Schedule does not apply to the circumstance in which a Scheduling Coordinator submits a Schedule that is an amalgam of different Market Participants' separate but simultaneously submitted Schedules.

**Clustering**

The process whereby a group of Interconnection Requests is studied together, instead of serially, for the purpose of conducting the Interconnection System Impact Study.

**Commercial Operation**

The status of a Generating Unit or project phase at a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

**Commercial Operation Date**

The date on which a Generating Unit or project phase at a Generating Facility commences Commercial Operation as agreed to by the applicable Participating TO, the CAISO, and the Interconnection Customer pursuant to Appendix E to the Large Generator Interconnection Agreement, and in accordance with the implementation plan agreed to by the Participating TO and the CAISO for multiple individual Generating Units or project phases at a Generating Facility where an Interconnection Customer intends to establish separate Commercial Operation Dates for those Generating Units or project phases.

|  |  |
|--|--|
| <b><u>Compatible Meter Data Server</u></b> | A meter data acquisition and processing system which is capable of passing Meter Data and/or Settlement Quality Meter Data to MDAS via File Transfer Protocol (FTP) and which has been certified by the ISO or its authorized representative.  |
| <b><u>Congestion</u></b>                   | A condition that occurs when there is insufficient Available Transfer Capacity to implement all Preferred Schedules simultaneously or, in real time, to serve all Generation and Demand. "Congested" shall be construed accordingly.   |
| <b><u>Congestion Management</u></b>        | The alleviation of Congestion in accordance with Applicable ISO Protocols and Good Utility Practice.   |
| <b><u>Congestion Management Charge</u></b> | The component of the Grid Management Charge that provides for the recovery of the ISO's costs of operating the Congestion Management process including, but not limited to, the management and operation of Inter-Zonal Congestion markets, Adjustment Bids, taking Firm Transmission Rights and Existing Contracts into |

account, and determining the price for mitigating Congestion for flows on Congested paths. The formula for determining the Congestion Management Charge is set forth in Appendix F, Schedule 1, Part A of this Tariff.

**Congestion Revenue**

Defined in Appendix BB.

**Right (CRR)**

**Congestion Zone**

A Zone identified as an Active Zone in Appendix I of the ISO Tariff.

**Connected Entity**

A Participating TO or any party that owns or operates facilities that are electrically interconnected with the ISO Controlled Grid.

**Constrained Output**

Generating resources with only two viable operating states: (a) off-line or (b) operating at their maximum output level.

**Generation**

**Constraints**

Physical and operational limitations on the transfer of electrical power through transmission facilities.

**Construction Activities**

Actions by a Participating TO that result in irrevocable financial commitments for the purchase of major electrical equipment or land for Participating TO's Interconnection Facilities or Network Upgrades assigned to the Interconnection Customer that occur after receipt of all appropriate governmental approvals needed for the Participating TO's Interconnection Facilities or Network Upgrades.

**Contingency**

Disconnection or separation, planned or forced, of one or more components from an electrical system.

**Control Area**

An electric power system (or combination of electric power systems) to which a common AGC scheme is applied in order to: i) match, at all times, the power output of the Generating Units within the electric power system(s), plus the Energy purchased from entities outside the electric power system(s), minus Energy sold to entities outside the electric power system, with the Demand within the electric power system(s); ii) maintain scheduled interchange with other Control Areas, within the limits of Good Utility Practice; iii) maintain the frequency of the electric power system(s) within reasonable limits in accordance with Good Utility Practice; and iv) provide sufficient generating capacity to maintain operating reserves in accordance with Good Utility Practice.

**Control Area Gross Load**

For the purpose of calculating and billing Minimum Load Costs, Emission Costs Charge and Start-Up Fuel Costs Charge, Control Area Gross Load is all Demand for Energy within the ISO Control Area. Control Area Gross Load shall not include Energy consumed by:

- (a) Station Power that is netted pursuant to Section 10.1.3; and
- (b) Load that is isolated electrically from the ISO Control Area (i.e., Load that is not synchronized with the ISO Control Area).

**FTR Market**

A transmission path from an originating Zone to a contiguous receiving Zone for which FTRs are auctioned by the ISO in accordance with Section 36.4 of the ISO Tariff.

**Full Capacity Deliverability Status**

The condition whereby a Large Generating Facility interconnected with the CAISO Controlled Grid, under coincident CAISO Control Area peak Demand and a variety of severely stressed system conditions, can deliver the Large Generating Facility's full output to the aggregate of Load on the CAISO Controlled Grid, consistent with the CAISO's reliability criteria and procedures and the CAISO On-Peak Deliverability Assessment.

**Full Marginal Loss Rate**

A rate calculated by the ISO for each Generation and Scheduling Point location to determine the effect on total system Transmission Losses of injecting an increment of Generation at each such location to serve an equivalent incremental MW of Demand distributed proportionately throughout the ISO Control Area.

**Generating Facility**

An Interconnection Customer's Generating Unit(s) used for the production of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Generating Facility Capacity**

The net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices.

**GCC**

The single point of contact at the grid control center of Southern California Edison Company.

**Generating Unit**

An individual electric generator and its associated plant and apparatus whose electrical output is capable of being separately identified and metered or a Physical Scheduling Plant that, in either case, is:

- (a) located within the ISO Control Area;
- (b) connected to the ISO Controlled Grid, either directly or via interconnected transmission, or distribution facilities; and
- (c) that is capable of producing and delivering net Energy (Energy in excess of a generating station's internal power requirements).

**Generation**

Energy delivered from a Generating Unit.

**Generator**

The seller of Energy or Ancillary Services produced by a Generating Unit.

**GMM (Generation Meter Multiplier)**

A number which when multiplied by a Generating Unit's Metered Quantity will give the total Demand to be served from that Generating Unit.

Wheeling Access Charge is payable, 2) Load that is exempt from the Access Charge pursuant to SPP 4.1, and the portion of the Load of an individual retail customer of a UDC or MSS Operator that is served by a Generating Unit that: (a) is located on the customer's site or provides service to the customer's site through arrangements as authorized by Section 218 of the California Public Utilities Code; (b) is a qualifying small power production facility or qualifying cogeneration facility, as those terms are defined in the FERC's regulations implementing Section 201 of the Public Utility Regulatory Policies Act of 1978; and (c) secures Standby Service from a Participating TO under terms approved by a Local Regulatory Authority or FERC, as applicable, or can be curtailed concurrently with an outage of the Generating Unit serving the Load. Gross Load forecasts consistent with filed TRR will be provided by each Participating TO to the ISO.

**Group Study**

The process whereby more than one Interconnection Request is studied together, instead of individually, for the purpose of conducting one or more of the Interconnection Studies or analyses therein.

**High Voltage Access Charge**

The Access Charge applicable under Section 26.1 to recover the High Voltage Transmission Revenue Requirements of each Participating TO in a TAC Area.

**High Voltage Transmission Facility**

A transmission facility that is owned by a Participating TO or to which a Participating TO has an Entitlement that is represented by a Converted Right, that is under the CAISO Operational Control, and that operates at a voltage at or above 200 kilovolts, and supporting facilities, and the costs of which are not directly assigned to one or more specific customers, provided that the High Voltage Transmission Facilities of a Participating TO shall include any Location Constrained Resource Interconnection Facility of that Participating TO that has been turned over to the CAISO's Operational Control.

**Interconnection**

Transmission facilities, other than additions or replacements to existing facilities that: i) connect one system to another system where the facilities emerge from one and only one substation of the two systems and are functionally separate from the ISO Controlled Grid facilities such that the facilities are, or can be, operated and planned as a single facility; or ii) are identified as radial transmission lines pursuant to contract; or iii) produce Generation at a single point on the ISO Controlled Grid; provided that such interconnection does not include facilities that, if not owned by the Participating TO, would result in a reduction in the ISO's Operational Control of the Participating TO's portion of the ISO Controlled Grid.

**Interconnection**

**Agreement**

A contract between a party requesting interconnection and the Participating TO that owns the transmission facility with which the requesting party wishes to interconnect.

**Interconnection Base  
Case Data**

Data including, but not limited to, base power flow, short circuit and stability databases, underlying Load, Generation, and transmission facility assumptions, Contingency lists, including relevant Remedial Action Schemes, per unit costs, and transmission diagrams used to perform Phase I Interconnection Studies and Phase II Interconnection Studies. Interconnection Base Case Data may include Critical Energy Infrastructure Information (as that term is defined by FERC). The Interconnection Base Case Data shall include transmission facilities approved by the CAISO under Section 24 in Appendix EE and Network Upgrades associated with Generation Facilities in (iv) below and Generating Facilities that (i) are directly interconnected to the CAISO Controlled Grid; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending request to interconnect to an Affected System; or (iv) are not interconnected to the CAISO Controlled Grid, but are subject to a fully executed LGIA (or its equivalent predecessor agreement) or for which an unexecuted LGIA (or its equivalent predecessor agreement) has been requested to be filed with FERC. To the maximum extent practicable, the Interconnection Base Case Data shall utilize the Unified Planning Assumptions developed pursuant to Section 24.2.4 in Appendix EE.



|   |   |
|---|---|
| <b><u>Interconnection Customer</u></b>                              | Any entity, including a Participating TO or any of its Affiliates or subsidiaries, that proposes to interconnect its Generating Facility with the ISO Controlled Grid.  |
| <b><u>Interconnection Customer's Interconnection Facilities</u></b> | All facilities and equipment, as identified in Appendix A of the Large Generator Interconnection Agreement, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the ISO Controlled Grid. Interconnection Customer's Interconnection Facilities are sole use facilities.  |
| <b><u>Interconnection Facilities</u></b>                            | The Participating TO's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the ISO Controlled Grid. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades. |
| <b><u>Interconnection Facilities Study</u></b>                      | A study conducted by the Participating TO(s), ISO, or a third party consultant for the Interconnection Customer to determine a list of facilities (including the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades), the cost of those facilities, and the time required to interconnect the Generating Facility with the ISO Controlled Grid. The scope of the study is defined in Section 8 of the Standard Large Generator Interconnection Procedures.  |
| <b><u>Interconnection Facilities Study Agreement</u></b>            | The form of agreement accepted by FERC and posted on the ISO Home Page for conducting the Interconnection Facilities Study.   |
| <b><u>Interconnection Feasibility Study</u></b>                     | A preliminary evaluation conducted by the Participating TO(s), ISO, or a third party consultant for the Interconnection Customer of the system impact and cost of interconnecting the Generating Facility to the ISO Controlled Grid, the scope of which is described in Section  |

6 of the Standard Large Generator Interconnection Procedures.

**Interconnection Feasibility**

The form of agreement accepted by FERC and posted on the ISO Home Page for conducting the Interconnection Feasibility Study.

**Study Agreement**

**Interconnection Financial**

Any of the financial instruments listed in LGIP Section 9.1 set forth in Appendix GG that are posted by an Interconnection Customer.

**Security**

**Interconnection Handbook**

A handbook, developed by the Participating TO and posted on the Participating TO's web site or otherwise made available by the Participating TO, describing technical and operational requirements for wholesale generators and loads connected to the Participating TO's portion of the ISO Controlled Grid, as such handbook may be modified or superseded from time to time. Participating TO's standards contained in the Interconnection Handbook shall be deemed consistent with Good Utility Practice and Applicable Reliability Criteria. In the event of a conflict between the terms of the LGIP or SGIP and the terms of the Participating TO's Interconnection Handbook, the terms in the LGIP or SGIP shall apply.

**Interconnection Request**

An Interconnection Customer's request, in the form of Appendix 1 to the Large Generator Interconnection Procedures or Attachment 2 to the Small Generator Interconnection Procedures, in accordance with Section 25.1 of the ISO Tariff.

**Interconnection Service**

The service provided by the Participating TO and ISO associated with interconnecting the Interconnection Customer's Generating Facility to the ISO Controlled Grid and enabling it to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Large Generator Interconnection Agreement, the Participating TO's TO Tariff, and the ISO Tariff.

**Interconnection Study**

Any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, and the Interconnection Facilities Study described in the Standard Large Generator Interconnection Procedures set forth in Appendix U or the Phase I Interconnection Study and the Phase II Interconnection Study described in the LGIP set forth in Appendix GG.

**Interconnection Study Cycle**

All requirements, actions, and respective obligations of the CAISO, Participating TO, and Interconnection Customer under the LGIP set forth in Appendix GG applicable to an Interconnection Request submitted in a particular Queue Cluster Window through execution by the parties or submission to FERC by one or more of the parties to an LGIA.

**Interconnection Study Deposit**

The cash deposit provided to the CAISO by Interconnection Customers under LGIP Section 3.5.1 set forth in Appendix GG as a requirement of a valid Interconnection Request to be used to offset the cost of the Interconnection Studies as set forth in LGIP Sections 3.5.1.2 and 3.5.1.3 set forth in Appendix GG.

**Interconnection System Impact Study**

An engineering study conducted by the Participating TO(s), ISO, or a third party consultant for the Interconnection Customer that evaluates the impact of the proposed interconnection on the safety and reliability of the ISO Controlled Grid and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility were

**ISO Website**

The ISO internet home page at <http://www.caiso.com> or such other internet address as the ISO shall publish from time to time.

**ISO-WECC Billing Services Agreement**

The agreement between the ISO and the WECC entered into by those parties in August 2007, as it may be amended from time to time, regarding the ISO's performance of certain billing services to facilitate the WECC's collection of NERC/WECC Charges.

**ISP (Internet Service Provider)**

An independent network service organization engaged by the ISO to establish, implement and operate WEnet.

**Joint Powers Agreement**

An agreement governing a Joint Powers Authority that is subject to the California Joint Exercise of Powers Act (California Government Code, Section 6500, et seq.).

**Joint Powers Authority**

An authority authorized by law through which two or more public entities jointly exercise their powers.

**Large Generating Facility**

A Generating Facility having a Generating Facility Capacity of more than 20 MW.

**Large Generator Interconnection Agreement (LGIA)**

The form of interconnection agreement applicable to an Interconnection Request pertaining to a Large Generating Facility, a pro forma version of which is set forth in Appendix V or Appendix HH, as applicable.

**Large Generator Interconnection Procedures (LGIP)**

The interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that are set forth in Appendix U or Appendix GG, as applicable.

**Large Generator Interconnection Study Process Agreement (LGISPA)**

The agreement between the CAISO and the Interconnection Customer for conducting the Interconnection Studies for a proposed Large Generating Facility, a pro forma version of which is accepted by FERC, posted on the CAISO Website, and set forth in Appendix GG.

**LARN Report for 2006**

The report, published by the ISO, which identifies each Local Reliability Area for 2006 and the contingencies that require the ISO to specify a geographically contiguous area as a Local Reliability Area, and the amount of generation (in MW) needed for each Local Reliability Area in order to satisfy Applicable Reliability Criteria, taking into account Non-Generation Solutions.

|   |   |
|---|---|
| <b><u>LGIA</u></b>                        | Standard Large Generator Interconnection Agreement or Large Generator Interconnection Agreement   |
| <b><u>LGIP</u></b>                        | Standard Large Generator Interconnection Procedures or Large Generator Interconnection Procedures   |
| <b><u>LGISPA</u></b>                      | Large Generator Interconnection Study Process Agreement   |
| <b><u>Line Loss Correction Factor</u></b> | The line loss correction factor as set forth in the Technical Specifications.   |
| <b><u>Load</u></b>                        | An end-use device of an End-Use Customer that consumes power. Load should not be confused with Demand, which is the measure of power that a Load receives or requires.  |
| <b><u>Load-Serving Entity (LSE)</u></b>   | Any entity (or the duly designated agent of such an entity, including, e.g. a Scheduling Coordinator), including a load aggregator or power marketer; (i) serving End Users within the ISO Control Area and (ii) that has been granted authority or has an obligation pursuant to California State or local law, regulation, or franchise to sell electric energy to End Users located within the ISO Control Area or (iii) is a Federal Power Marketing Authority that serves retail Load. |
| <b><u>Load Share Quantity</u></b>         | The product of Total Import Capability and Import Capability Load Share.  |
| <b><u>Load Shedding</u></b>               | The systematic reduction of system Demand by temporarily decreasing the supply of Energy to Loads in response to transmission system or area capacity shortages, system instability, or voltage control considerations.   |

**Non-Spinning Reserve**

The portion of off-line generating capacity that is capable of being synchronized and Ramping to a specified load in ten minutes (or load that is capable of being interrupted in ten minutes) and that is capable of running (or being interrupted) for at least two hours.

**NRC**

The Nuclear Regulatory Commission or its successor.

**NRC (Standards)**

The reliability standards published by the NRC from time to time.

**Off-Peak Deliverability Assessment**

The technical study performed under LGIP Section 6.3.2.2 set forth in Appendix GG.

**On-Peak Deliverability Assessment**

The technical study performed under LGIP Section 6.3.2.1 set forth in Appendix GG.

**Operating Procedures**

Procedures governing the operation of the ISO Controlled Grid as the ISO may from time to time develop, and/or procedures that Participating TOs currently employ which the ISO adopts for use.

**On-Site Self-Supply**

Energy from a Generating Unit that is deemed to have self-supplied all or a portion of its associated Station Power load without use of the ISO Controlled Grid during the Netting Period.

**Operating Reserve**

The combination of Spinning and Non-Spinning Reserve required to meet WECC and NERC requirements for reliable

**Participating Generator** through a Scheduling Coordinator over the ISO Controlled Grid from a Generating Unit with a rated capacity of 1 MW or greater, or from a Generating Unit providing Ancillary Services and/or submitting Supplemental Energy bids through an aggregation arrangement approved by the ISO, which has undertaken to be bound by the terms of the ISO Tariff, in the case of a Generator through a Participating Generator Agreement.

**Participating TO's**  
**Interconnection Facilities** All facilities and equipment owned, controlled, or operated by the Participating TO from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the Large Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Participating TO's Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Participating TO** A party to the TCA whose application under Section 2.2 of the TCA has been accepted and who has placed its transmission assets and Entitlements under the ISO's Operational Control in accordance with the TCA. A Participating TO may be an Original Participating TO or a New Participating TO.

**Path 15 Upgrade** The upgraded transmission facilities across the Path 15 Inter-Zonal Interface that have been turned over to ISO Operational Control.

**Payment Date** The date by which invoiced amounts are to be paid under the terms of the ISO Tariff.

**PBR (Performance-Based Ratemaking)** Regulated rates based in whole or in part on the achievement of specified performance objectives.

**Phase I Interconnection Study**

The engineering study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), that evaluates the impact of the proposed interconnection on the safety and reliability of the CAISO Controlled Grid and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility(ies) were interconnected without identified project modifications or system modifications, as provided in the On-Peak Deliverability Assessment or Off-Peak Deliverability Assessment, and other potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Large Generator Interconnection Procedures set forth in Appendix GG. The study will also identify the approximate total costs, based on per unit costs, of mitigating these impacts, along with an equitable allocation of those costs to Interconnection Customers for their individual Generating Facilities.

**Phase II Interconnection Study**

An engineering and operational study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), to determine the Point of Interconnection and a list of facilities (including the Participating TO's Interconnection Facilities, Network Upgrades, Distribution Upgrades, and Stand Alone Network Upgrades), the cost of those facilities, and the time required to interconnect the Generating Facility(ies) with the CAISO Controlled Grid.

**Physical Scheduling Plant**

A group of two or more related Generating Units, each of which is individually capable of producing Energy, but which either by physical necessity or operational design must be operated as if they were a single Generating Unit and any Generating Unit or Units containing related multiple generating components which meet one or more of the following criteria: i) multiple generating components are related by a common flow of fuel which cannot be interrupted without a substantial loss of efficiency of the combined output of all components; ii) the Energy production



from one component necessarily causes Energy production from other components; iii) the operational arrangement of related multiple generating components determines the overall physical efficiency of the combined output of all components; iv) the level of coordination required to schedule individual generating components would cause the ISO to incur scheduling costs far in excess of the benefits of having scheduled such individual components separately; or v) metered output is available only for the combined output of related multiple generating components and separate generating component metering is either impractical or economically inefficient.

**Planning Reserve Margin**

A Planning Reserve Margin shall be that quantity or percentage of capacity in MWs that exceeds the Demand Forecast set forth in Section 40.3 as provided for in Section 40.4 of this ISO Tariff.

**PMS (Power Management System)**

The ISO computer control system used to monitor the real-time performance of the various elements of the ISO Controlled Grid, control Generation, and perform operational power flow studies.

**Point of Change of Ownership**

The point, as set forth in Appendix A to the Large Generator Interconnection Agreement, where the Interconnection Customer's Interconnection Facilities connect to the Participating TO's Interconnection Facilities.

**Point of Interconnection**

The point, as set forth in Appendix A to the Large Generator Interconnection Agreement or Attachment 3 to the Small Generator Interconnection Agreement, where the Interconnection Facilities connect to the ISO Controlled Grid.

**Power Flow Model**

The computer software used by the ISO to model the voltages, power injections and power flows on the ISO Controlled Grid and determine the expected Transmission Losses and Generation Meter Multipliers.

**Power System Stabilizers (PSS)**

An electronic control system applied on a Generating Unit that helps to damp out dynamic oscillations on a power system. The PSS senses Generator variables, such as voltage, current and shaft speed, processes this information and sends control signals to the Generator voltage regulator.

**Pre-Construction  
Activities**

Actions by a Participating TO, other than those required by an Engineering and Procurement Agreement under LGIP Section 10 in Appendix GG, undertaken prior to Construction Activities in order to prepare for the construction of Participating TO's Interconnection Facilities or Network Upgrades assigned to the Interconnection Customer, including, but not limited to, preliminary engineering, permitting activities, environmental analysis, or other activities specifically needed to obtain governmental approvals for the Participating TO's Interconnection Facilities or Network Upgrades.

**Preferred Day-Ahead  
Schedule**

A Scheduling Coordinator's Preferred Schedule for the ISO Day-Ahead scheduling process.

**Preferred Hour-Ahead  
Schedule**

A Scheduling Coordinator's Preferred Schedule for the ISO Hour-Ahead scheduling process.

Scheduling Coordinator directly with the ISO on a must-take basis.  
Regulatory Must-Take Generation includes qualifying facility Generating Units as defined by federal law, nuclear units and pre-existing power purchase contracts with minimum energy take requirements.

**Reliability Coordinator**

The person responsible for Security Monitoring in real time for the California Area.

**Reliability Criteria**

Pre-established criteria that are to be followed in order to maintain desired performance of the ISO Controlled Grid under contingency or steady state conditions.

**Reliability Must-Run Charge (RMR Charge)**

The sum payable by a Responsible Utility to the ISO pursuant to Section 30.6.1.1 of the ISO Tariff for the costs, net of all applicable credits, incurred under the RMR Contract.

**Reliability Must-Run Contract (RMR Contract)**

A Must-Run Service Agreement between the owner of an RMR Unit and the ISO.

**Reliability Must-Run Generation (RMR Generation)**

Generation that the ISO determines is required to be on line to meet Applicable Reliability Criteria requirements. This includes i) Generation constrained on line to meet NERC and WECC reliability criteria for interconnected systems operation; ii) Generation needed to meet Load demand in constrained areas; and iii) Generation needed to be operated to provide voltage or security support of the ISO or a local area.

**Reliability Must-Run Unit (RMR Unit)**

A Generating Unit which is the subject of a Reliability Must-Run Contract.

**Reliability Network**

**Upgrades**

The transmission facilities at or beyond the Point of Interconnection identified in the Interconnection Studies as necessary to interconnect one or more Large Generating Facility(ies) safely and reliably to the ISO Controlled Grid, which would not have been necessary but for the interconnection of one or more Large Generating Facility(ies), including Network Upgrades necessary to remedy short circuit or stability problems, or thermal overloads. Reliability Network Upgrades shall only be deemed necessary for thermal overloads, occurring under any system condition, where such thermal overloads cannot be adequately mitigated through Congestion Management, Operating Procedures, or special protection systems based on the characteristics of the Large Generating Facilities included in the Interconnection Studies, limitations on market models, systems, or information, or other factors specifically identified in the Interconnection Studies. Reliability Network Upgrades also include, consistent with WECC practice, the facilities necessary to mitigate any adverse impact the Large Generating Facility's interconnection may have on a path's WECC rating.

**Reliability Services Costs**

The costs associated with services provided by the ISO: 1) that

**Resource Adequacy**

A resource that is required to offer Resource Adequacy Capacity.

**Resource**

The criteria for determining the types of resources that are eligible to provide Qualifying Capacity may be established by the CPUC, other applicable Local Regulatory Authority and provided to the ISO, or the default provision in Section 40.13 of this ISO Tariff.

**Resource-Specific**

**Settlement Interval Ex**

**Post Price**

The Resource-Specific Settlement Interval Ex Post Price will equal the Energy-weighted average of the applicable Dispatch Interval Ex Post Prices for each Settlement Interval taking into account each resource's Instructed Imbalance Energy, except Regulation Energy. The Resource-Specific Settlement Interval Ex Post Price shall apply to those resources that are capable of responding to ISO Dispatch Instructions.

**Responsible Utility**

The utility which is a party to the TCA in whose PTO Service Territory the Reliability Must-Run Unit is located or whose PTO Service Territory is contiguous to the PTO Service Territory in which a Reliability Must-Run Unit owned by an entity outside of the ISO Controlled Grid is located.

**Results Meeting**

The meeting among the CAISO, the applicable Participating TO(s), the Interconnection Customer, and, if applicable, other Affected System Operators to discuss the results of the Phase I Interconnection Study as set forth in LGIP Section 6 set forth in Appendix GG.

**Revenue Requirement**

The revenue level required by a utility to cover expenses made on an investment, while earning a specified rate of return on the investment.

**Revised Adjusted RMR**

**Invoice**

The monthly invoice issued by the RMR Owner to the ISO pursuant to the RMR Contract reflecting any appropriate revisions to the Adjusted RMR Invoice based on the ISO's validation and actual data for the billing month.

reasonable uneconomic portion of costs associated with Generation-related assets and obligations, nuclear decommissioning, and capitalized Energy efficiency investment programs approved prior to August 15, 1996 and as defined in the California Assembly Bill No. 1890 approved by the Governor on September 23, 1996.

**Short Start**

Generating Units that that have a cycle time less than five hours (Start-Up Time plus Minimum Run Time is less than five hours) have a Start Up Time less than two hours, and that can be fully optimized with respect to this cycle time.

**Site Control**

Documentation reasonably demonstrating: (1) ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Generating Facility; (2) an option to purchase or acquire a leasehold site for such purpose; or (3) an exclusivity or other business relationship between Interconnection Customer and the entity having the right to sell, lease or grant Interconnection Customer the right to possess or occupy a site for such purpose.

**Site Exclusivity**

Documentation reasonably demonstrating:

(1) For private land:

- (a) Ownership of, a leasehold interest in, or a right to develop property upon which the Generating Facility will be located consisting of a minimum of 50% of the acreage reasonably necessary to accommodate the Generating Facility; or
- (b) an option to purchase or acquire a leasehold interest in property upon which the Generating Facility will be located consisting of a minimum of 50% of the acreage reasonably necessary to accommodate the Generating Facility.

(2) For public land, including that controlled or managed by any federal, state or local agency, a final, non-appealable permit, license, or other right to use the property for the purpose of generating electric power and in acreage reasonably necessary to accommodate the Generating Facility, which exclusive right to use public land under the management of the federal Bureau of Land Management shall be in a form specified by the Bureau of Land Management.

**Site Exclusivity Deposit**

The cash deposit provided to the CAISO by Interconnection Customers under LGIP Section 3.5.1 set forth in Appendix GG as an option in lieu of demonstrating Site Exclusivity for a valid Interconnection Request and treated in accordance with LGIP Section 3.5.1.4 set forth in Appendix GG.

**Scheduling and Logging system for the ISO of California (SLIC)**

A logging application that allows Market Participants to notify the ISO when a unit's properties change due to physical problems. Users can modify the maximum and minimum output of a unit, as well as the ramping capability of the unit.

**Small Generating Facility**

A Generating Facility that has a Generating Facility Capacity of no more than 20 MW.

**Spinning Reserve**

The portion of unloaded synchronized generating capacity that is immediately responsive to system frequency and that is capable of being loaded in ten minutes, and that is capable of running for at least two hours.

**Stand Alone Network  
Upgrades**

Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the ISO Controlled Grid or Affected Systems during their construction. The Participating TO, the ISO, and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Large Generator Interconnection Agreement.

**Standard Large Generator  
Interconnection**

**Agreement**

**(LGIA)**

**Standard Large Generator  
Interconnection**

The form of interconnection agreement applicable to an Interconnection Request pertaining to a Large Generating Facility, a pro forma version of which is set forth in Appendix V.

The ISO Protocol that sets forth the interconnection procedures applicable to an Interconnection Request pertaining to a Large



**Procedures**

Generating Facility that is set forth in Appendix U.

**(LGIP)**

**Standard Ramp (-ing)**

A ramp calculated from two consecutive Final Hour Ahead Schedules that results in a straight trajectory between 10 minutes before the start of an operating hour to 10 minutes after the start of the operating hour

**Standby Rate**

A rate assessed a Standby Service Customer by the Participating TO that also provides retail electric service, as approved by the Local Regulatory Authority, or FERC, as applicable, for Standby Service which compensates the Participating TO, among other things, for costs of High Voltage Transmission Facilities.

**Standby Service**

Service provided by a Participating TO that also provides retail electric service, which allows a Standby Service Customer, among other things, access to High Voltage Transmission Facilities for the delivery of backup power on an instantaneous basis to ensure that Energy may be reliably delivered to the Standby Service Customer in the event of an outage of a Generating Unit serving the customer's Load.

**Standby Service**

**Customer**

A retail End-Use Customer of a Participating TO that also provides retail electric service that receives Standby Service and pays a Standby Rate.

**Standby Transmission**

**Revenue**

The transmission revenues, with respect to cost of both High Voltage Transmission Facilities and Low Voltage Transmission Facilities, collected directly from Standby Service Customers through charges for Standby Service.

**Start-Up Cost Charge**

The charge determined in accordance with Section 40.12.

**Start-Up Cost Demand**

The level of Demand specified in Section 40.12.3.

**Start-Up Cost Invoice**

The invoice submitted to the ISO in accordance with Section 40.12.6.

**Start-Up Cost Trust**

The trust account established in accordance with Section 40.12.2.

**Account**

**Start-Up Costs**

The cost incurred by a particular Generating Unit from the time of first fire, the time of receipt of an ISO Dispatch instruction, or the time the unit was last synchronized to the grid, whichever is later, until the time the generating unit reaches its minimum operating level. Start-Up Costs are determined as the sum of (1) the cost of auxiliary power used during the start-up and (2) the number that is determined multiplying the actual amount of fuel consumed by the proxy gas price

## **SECTION 1. OBJECTIVES, DEFINITIONS, AND INTERPRETATION.**

### **1.1 Objectives.**

The objective of this LGIP is to implement FERC's Order No. 2003 setting forth the requirements for Large Generating Facility interconnections to the ISO Controlled Grid. This LGIP applies to Interconnection Requests not assigned to a Queue Cluster Window pursuant to the terms of this CAISO Tariff for the performance of its Interconnection Studies.

### **1.2 Definitions.**

#### **1.2.1 Master Definitions Supplement.**

Unless the context otherwise requires, any word or expression defined in the Master Definitions Supplement to the ISO Tariff shall have the same meaning where used in this LGIP. A reference to a Section or an Appendix is a reference to a Section or an Appendix of the ISO Tariff. References to LGIP are to this Protocol or to the stated paragraph of this Protocol.

#### **1.2.2 Special Definitions for this LGIP.**

In this LGIP, the following words and expressions shall have the meanings set opposite them:

**"Confidential Information"** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, subject to Section 13.1 of the LGIP.

**"Dispute Resolution"** shall mean the procedure set forth in this LGIP for resolution of a dispute between the Parties.

**"Force Majeure"** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**"Governmental Authority"** shall mean any federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, ISO, or Participating TO, or any Affiliate thereof.

**"Party" or "Parties"** shall mean the ISO, Participating TO(s), Interconnection Customer or the applicable combination of the above.

**"Reasonable Efforts"** shall mean, with respect to an action required to be attempted or taken by a Party under the Standard Large Generator Interconnection Procedures, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

### **1.2.3 Rules of Interpretation.**

- (a) Unless the context otherwise requires, if the provisions of this LGIP and the ISO Tariff conflict, the ISO Tariff will prevail to the extent of the inconsistency.
- (b) A reference in this LGIP to a given agreement, ISO Protocol or instrument shall be a reference to that agreement or instrument as modified, amended, supplemented or restated through the date as of which such reference is made.
- (c) The captions and headings in this LGIP are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this LGIP.
- (d) This LGIP shall be effective as of the date specified by FERC.

## **Section 2. Scope and Application.**

### **2.1 Application of Standard Large Generator Interconnection Procedures.**

Sections 2 through 13 of this LGIP apply to processing an Interconnection Request pertaining to a Large Generating Facility that is not assigned to a Queue Cluster Window pursuant to the terms of this CAISO Tariff for the performance of its Interconnection Studies.

### **2.2 Comparability.**

The ISO shall receive, process and analyze Interconnection Requests in a timely manner as set forth in this LGIP. The ISO will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers, whether the Generating Facilities are owned by a Participating TO, its subsidiaries, or Affiliates or others.

### **2.3 Base Case Data.**

The ISO and/or the applicable Participating TO(s) shall provide base power flow, short circuit and stability databases, including all underlying assumptions, and contingency list upon request subject to applicable confidentiality provisions in LGIP Section 13.1. The applicable Participating TO(s) and the ISO are permitted to require that the Interconnection Customer sign a confidentiality agreement before the release of commercially sensitive information or Critical Energy Infrastructure Information (as that term is defined by FERC) in the Base Case data. Such Base Cases shall include (i) generation projects and (ii) transmission projects, including merchant transmission projects that are proposed for the transmission system for which a transmission expansion plan has been submitted and approved by the applicable authority.

### **2.4 No Applicability to Transmission Service.**

Nothing in this LGIP shall constitute a request for transmission service or confer upon an Interconnection Customer any right to receive transmission service.

**Section 11. Standard Large Generator Interconnection Agreement (LGIA).**

**11.1 Tender.**

**11.1.1** Within thirty (30) Calendar Days after the ISO receives the Interconnection Customer's written comments, or notification of no comments, to the draft Interconnection Facilities Study report, the applicable Participating TO(s) and the ISO shall tender a draft LGIA, together with draft appendices. The draft LGIA shall be in the form of the FERC-approved standard form LGIA set forth in CAISO Tariff Appendix V. The Interconnection Customer shall provide written comments, or notification of no comments, to the draft appendices to the applicable Participating TO(s) and the ISO within (30) Calendar Days of receipt.

**11.1.2** Consistent with Section 3.4.4 and 11.1.1 of this LGIP, when the transmission system of a Participating TO, in which the Interconnection Point is not located, is affected, such Participating TO shall tender a separate agreement, in the form of the LGIA, as appropriately modified.

**Point of Interconnection** shall mean the point, as set forth in Part A to this LGIA, where the Interconnection Facilities connect to the Participating TO's Transmission System.

**Qualifying Facility** shall mean a qualifying cogeneration facility or qualifying small power production facility, as defined in the Code of Federal Regulations, Title 18, Part 292 (18 C.F.R. §292).

**QF PGA** shall mean a Qualifying Facility Participating Generator Agreement specifying the special provisions for the operating relationship between a Qualifying Facility and the ISO, a pro forma version of which is set forth in Appendix B.3 of the ISO Tariff.

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under this LGIA, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Scoping Meeting** shall mean the meeting among representatives of the Interconnection Customer, the Participating TO(s), other Affected Systems, and the ISO conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

**Stand Alone Network Upgrades** shall mean Network Upgrades that the Interconnection Customer may construct without affecting day-to-day operations of the ISO Controlled Grid or Affected Systems during their construction. The Participating TO, the ISO, and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Part A to this LGIA.

**Standard Large Generator Interconnection Procedures (LGIP)** shall mean the ISO protocol that sets forth the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that is included in ISO Tariff Appendix U.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, that protects (1) the Participating TO's Transmission System, Participating TO's Interconnection Facilities, ISO Controlled Grid, and Affected Systems from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the ISO Controlled Grid, Participating TO's Interconnection Facilities, and Affected Systems or on other delivery systems or other generating systems to which the ISO Controlled Grid is directly connected.

**Transmission Control Agreement** shall mean ISO FERC Electric Tariff No. 7.

**Trial Operation** shall mean the period during which the Interconnection Customer is engaged in on-site test operations and commissioning of an Electric Generating Unit prior to Commercial Operation.

## ARTICLE 2. EFFECTIVE DATE, TERM AND TERMINATION

**2.1 Effective Date.** This LGIA shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by FERC. The ISO and Participating TO shall promptly file this LGIA with FERC upon execution in accordance with Article 3.1, if required.

**2.2 Term of Agreement.** Subject to the provisions of Article 2.3, this LGIA shall remain in effect for a period of \_\_\_\_ years from the Effective Date (**Term Specified in Individual Agreements to be ten (10) years or such other longer period as the Interconnection Customer may request**) and shall be automatically renewed for each successive one-year period thereafter.

1.5 Responsibilities of the Parties

- 1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice. The Parties shall use the Large Generator Interconnection Agreement (ISO Tariff Appendix V or Appendix HH, as applicable) to interpret the responsibilities of the Parties under this Agreement.
- 1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.
- 1.5.3 The Participating TO shall construct, operate, and maintain its Interconnection Facilities and Upgrades in accordance with this Agreement, and with Good Utility Practice. The ISO and the Participating TO shall cause the Participating TO's Transmission System to be operated and controlled in a safe and reliable manner and in accordance with this Agreement.
- 1.5.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Participating TO and any Affected Systems. The Interconnection Customer shall comply with the Participating TO's Interconnection Handbook. In the event of a conflict between the terms of this Agreement and the terms of the Participating TO's Interconnection Handbook, the terms in this Agreement shall govern.
- 1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Participating TO and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the ISO Controlled Grid, the Participating TO's electric system, the Participating TO's personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.
- 1.5.6 The Participating TO and the ISO shall coordinate with Affected Systems to support the interconnection.
- 1.5.7 The Interconnection Customer shall execute the Reliability Management System Agreement of the Western Electricity Coordinating Council prior to parallel operation of the Small Generating Facility. The Reliability Management System Agreement is provided as Attachment 8 to this Agreement.

alternatives to the construction of transmission additions or upgrades, such as acceleration or expansion of existing projects, Demand-side management, Remedial Action Schemes, appropriate Generation, interruptible Loads or reactive support. The CAISO shall direct each Participating TO with a PTO Service Area, as a registered Transmission Planner with NERC, to perform the necessary studies, based on the Unified Planning Assumptions and Study Plan as set forth in Section 24.2.3 of this Appendix EE, any applicable Interconnection Study, and in accordance with the Business Practice Manual, to determine the facilities needed to meet all Applicable Reliability Criteria and CAISO Planning Standards. The Participating TO with a PTO Service Area shall provide the CAISO and other Market Participants with all information relating to the studies performed under this Section, subject to any limitation provided in Section 20.2 of the CAISO Tariff or the applicable LGIP. The CAISO shall be free to propose any transmission upgrades or additions it deems necessary to ensure System Reliability consistent with Applicable Reliability Criteria and CAISO Planning Standards. The Participating TO with a PTO Service Territory in which the transmission upgrade or addition deemed needed under this Section 24.1.2 of this Appendix EE is to be located shall be the Project Sponsor, with the responsibility to construct, own and finance, and maintain such transmission upgrade or addition.

**24.1.3 Location Constrained Resource Interconnection Facility Projects.**

The CAISO, CPUC, CEC, a Participating TO or any other Market Participant may propose a transmission addition as a Location Constrained Resource Interconnection Facility. A proposal shall include the following information, to the extent available:

- (a) Information showing that the proposal meets the requirements of Section 24.1.3.1 of this Appendix EE; and
- (b) A description of the proposed facility, including the following information:
  - (1) Transmission studies demonstrating that the proposed facility satisfies Applicable Reliability Criteria and CAISO Planning Standards;

- (c) Each Participating TO shall report annually to the CAISO the amount of its net investment in LCRIFs (net of the amount of the capital costs of LCRIFs to be recovered from LCRIGs pursuant to Section 26.6), the portion of the capital costs of LCRIFs credited to its TRR, and its net investment in High Voltage Transmission Facilities reflected in its High Voltage TRR (net of the amount of the capital costs of LCRIFs to be recovered from LCRIGs pursuant to Section 26.6), to enable the CAISO to make the determination required under Section 24.1.3.1(b)(1) of this Appendix EE.

**24.1.3.2 Demonstration of Interest in a Location Constrained Resource Interconnection Facility.**

A proponent of an LCRIF must demonstrate interest in the LCRIF equal to sixty percent (60%) or more of the capacity of the facility in the following manner:

- (a) the proponent's demonstration must include a showing that LCRIGs that would connect to the facility and would have a combined capacity equal to at least twenty-five percent (25%) of the capacity of the facility have executed Large Generator Interconnection Agreements or Small Generator Interconnection Agreements, as applicable; and
- (b) to the extent the showing pursuant to Section 24.1.3.2(a) of Appendix EE does not constitute sixty percent (60%) of the capacity of the LCRIF, the proponent's demonstration of the remainder of the required minimum level of interest must include a showing that additional LCRIGs:
- (1) in the case of Large Generating Facilities subject to the LGIP set forth in Appendix GG, have obtained Site Exclusivity or paid the Site Exclusivity Deposit in lieu of Site Exclusivity, provided that any Site Exclusivity Deposit paid pursuant to Section 3.5 of the LGIP set forth in Appendix GG shall satisfy this requirement, or, in the case of Large Generating Facilities subject to the LGIP set forth in Appendix U and Small Generating Facilities, have obtained control over their site or paid a deposit to the CAISO in the amount of \$250,000, which deposit shall be refundable if the LCRIF is not approved or is withdrawn by the proponent; and



- (2) have demonstrated interest in the LCRIF by one of the following methods:
  - (i) executing a firm power sales agreement for the output of the LCRIG for a period of five years or longer; or
  - (ii) in the case of Large Generating Facilities subject to the LGIP set forth in Appendix GG, filing an Interconnection Request and paying the Interconnection Study Deposit required by Section 3.5 of the LGIP set forth in Appendix GG; or

- (iii) in the case of Large Generating Facilities subject to the LGIP set forth in Appendix U and Small Generating Facilities, being in the CAISO's interconnection queue and paying a deposit to the CAISO equal to the sum of the minimum deposits required of an Interconnection Customer for all studies performed in accordance with the Large Generator Interconnection Procedures (Appendix U) or Small Generator Interconnection Procedures (Appendix AA), as applicable to the LCRIG, less the amount of any deposits actually paid by the LCRIG for such studies. The deposit shall be credited toward such study costs. If the LCRIF is not approved or is withdrawn by the proponent, any deposit paid under this provision shall be refundable to the extent it exceeds costs incurred by the CAISO for such studies; or
- (iv) paying a deposit to the CAISO equal to five percent (5%) of the LCRIG's pro rata share of the capital costs of a proposed LCRIF. The deposit shall be credited toward costs of Interconnection Studies performed in connection with the Large Generator Interconnection Procedures (Appendix U or Appendix GG, as applicable) or Small Generator Interconnection Procedures (Appendix AA), whichever is applicable. If the LCRIF is not approved or is withdrawn by the proponent, any deposit paid under this provision shall be refundable to the extent it exceeds the costs incurred by the CAISO for such studies.

**24.1.3.3 Coordination With Transmission Additions Proposed by Non-Participating TOs.**

In the event that a facility proposed as an LCRIF would connect to LCRIGs in an Energy Resource Area that would also be connected by a transmission facility that is in existence or is proposed to be constructed by an entity that is not a Participating TO and that does not intend to place that facility under the Operational Control of the CAISO, the CAISO shall coordinate with the entity owning or proposing that transmission facility through any regional planning process to avoid the unnecessary construction of duplicative transmission additions to connect the same LCRIGs to the CAISO Controlled Grid.

**24.1.3.4 Evaluation of Location Constrained Resource Interconnection Facilities.**

In evaluating whether a proposed LCRIF that meets the requirements of Section 24.1.3.1 of this Appendix EE is needed, and for purposes of ranking and prioritizing LCRIF projects, the CAISO will consider the following factors:

- (a) Whether, and if so, the extent to which, the facility meets or exceeds applicable CAISO Planning Standards, including standards that are Applicable Reliability Criteria.
- (b) Whether, and if so, the extent to which, the facility has the capability and flexibility both to interconnect potential LCRIGs in the Energy Resource Area and to be converted in the future to a network transmission facility.
- (c) Whether the projected cost of the facility is reasonable in light of its projected benefits, in comparison to the costs and benefits of other alternatives for connecting Generating Units or otherwise meeting a need identified in the CAISO Transmission Planning Process, including alternatives that are not LCRIFs. In making this determination, the CAISO shall take into account, among other factors, the following:
  - (1) The potential capacity of LCRIGs and the potential Energy that could be produced by LCRIGs in each Energy Resource Area;
  - (2) The capacity of LCRIGs in the CAISO's interconnection process for each Energy Resource Area;
  - (3) The projected cost and in-service date of the facility in comparison with other transmission facilities that could connect LCRIGs to the CAISO Controlled Grid;
  - (4) Whether, and if so, the extent to which, the facility would provide additional reliability or economic benefits to the CAISO Controlled Grid; and
  - (5) Whether, and if so, the extent to which, the facility would create a risk of stranded costs.

- (e) Account for any effects on the CAISO Controlled Grid of the interconnection of Generating Units on the Distribution System under the Wholesale Distribution Access Tariffs of the Participating TOs, including an assessment of the deliverability of such Generating Units on a basis comparable to the Deliverability Assessment performed under Appendix U or Appendix GG, as applicable.

#### **24.2.1 CAISO Planning Standards Committee.**

The CAISO shall maintain a Planning Standards Committee, which shall be open to participation by all Market Participants, electric utility regulatory agencies within California, and other interested parties, to review, provide advice on, and propose modifications to CAISO Planning Standards for consideration by CAISO management and the CAISO Governing Board. The Planning Standards Committee shall meet, at a minimum, on an annual basis prior to publication of the draft Unified Planning Assumptions and Study Plan under Section 24.2.3 of this Appendix EE; however, additional meetings, web conferences, teleconferences may be scheduled as needed. Meetings of the Planning Standards Committee shall be noticed by Market Notice and such notice shall be posted to the CAISO Website. Teleconference capability will be made available for all meetings of the Planning Standards Committee. The CAISO Vice President of Planning and Infrastructure Development or his or her designee shall serve as chair of the Planning Standards Committee. All materials addressed at or relating to such meetings, including agendas, presentations, background papers, party comments, and minutes shall be posted to the CAISO Website. The chair of the Planning Standards Committee shall seek approval by the CAISO Governing Board of any modifications to the CAISO Planning Standards, as those CAISO Planning Standards exist as of the effective date of Section 24.2 of this Appendix EE, and must include in the report to the CAISO Governing Board a summary of the positions of parties with respect to the proposed modifications to the CAISO Planning Standards and the ground(s) for rejecting modifications, if any, proposed by Market Participants or other interested parties.

**24.2.2 Request Window.**

Market Participants may propose Economic Planning Studies and transmission upgrades or additions for inclusion in the annual Transmission Plan during a Request Window. The duration of the Request Window will be set forth in the Business Practice Manual and will occur in the year prior to the year in which the Transmission Plan is prepared. Proposals for Economic Planning Studies and transmission upgrades or additions must use the forms and satisfy the information and technical requirements set forth in the Business Practice Manual. Proposals for transmission additions or upgrades must be within or connect to the CAISO Control Area or CAISO Controlled Grid and proposals for Economic Planning Studies must be intended to promote competition or economic efficiency of serving Load within the CAISO Control Area, but may relate to Congestion relief or transmission capacity expansion outside the CAISO Control Area. The following proposals will only be considered in the Transmission Plan if proposed during the Request Window:

- (a) Economic transmission upgrades or additions proposed under Section 24.1.1 of this Appendix EE, except for projects costing less than \$50 million that are identified through Participating TO proposals provided pursuant to the Study Plan;
- (b) Location Constrained Resource Interconnection Facilities under Section 24.1.3 of this Appendix EE not identified by the CAISO as part of Interconnection Studies performed under the LGIP set forth in Appendix U or Appendix GG;
- (c) Demand response programs that are proposed for inclusion in the base case or assumptions for the Transmission Plan or as alternatives to transmission additions or upgrades;
- (d) Generation projects that are proposed as solutions to Congestion identified in previously published Economic Planning Studies, for inclusion in long-term planning studies, or as alternatives to transmission additions or upgrades; and
- (e) Requests for Economic Planning Studies.

**24.2.3.4 Information Requested from Interconnected Control Areas, Sub-Regional Planning Groups and Electric Utility Regulatory Agencies.**

In accordance with Section 24.8 of this Appendix EE, the CAISO shall obtain or solicit from interconnected Control Areas, regional and sub-regional planning groups within the WECC, the CPUC, the CEC, and Local Regulatory Authorities information required by, or anticipated to be useful to, the CAISO in its performance of the Transmission Planning Process, including, but not limited to (1) long-term transmission system plans; (2) long-term resource plans; (3) generation interconnection process information; (4) Demand forecasts; and (5) any other data necessary for the development of power flow, short-circuit, and stability cases over the planning horizon of the CAISO Transmission Planning Process.

**24.2.3.5 Obligation to Provide Updated Information.**

If material changes to the information provided under Sections 24.2.3.1 and 24.2.3.2 of this Appendix EE occur during the annual Transmission Planning Process, the providers of the information must provide notice to the CAISO of the changes.

**24.2.4 Unified Planning Assumptions and Study Plan.**

**24.2.4.1 Additional Projects and Data for Development of the Unified Planning Assumptions and Study Plan.**

The CAISO will develop Unified Planning Assumptions and Study Plan using information and data received during the Request Window and under Section 24.2.3 of this Appendix EE. The CAISO will also use the following in the development of the Unified Planning Assumptions and Study Plan:

- (1) WECC base cases for the relevant planning horizon;
- (2) transmission upgrades and additions approved by the CAISO and scheduled to be energized within the planning horizon;

- (3) Location Constrained Resource Interconnection Facilities conditionally approved under Section 24.1.3.1(a) of this Appendix EE;
- (4) Network Upgrades identified pursuant to Section 25, Appendix U, Appendix GG, or Appendix W relating to the CAISO's Large Generator Interconnection Procedures and Appendix AA relating to the CAISO's Small Generator Interconnection Procedures;
- (5) operational solutions validated by the CAISO to address Local Capacity Area Resource requirements;
- (6) regulatory initiatives, as appropriate, including state regulatory agency initiated programs;
- (7) Energy Resource Areas or similar resource areas identified as high priority by the CPUC or CEC; and
- (8) results and analyses from Economic Planning Studies or other assessments that may have identified potentially needed transmission upgrades or additions performed in past CAISO Transmission Planning Process cycles.

**24.2.4.2 General Scope of Unified Planning Assumptions and Study Plan.**

The Unified Planning Assumptions and Study Plan shall, at a minimum, describe:

- (a) the planning data and assumptions to be used, to the maximum extent possible, as a base case for each technical study to be performed in the Transmission Planning Process cycle, including, but not limited to, those related to Demand Forecasts and distribution, generation capacity additions and retirements, and transmission system modifications;

**24.2.5.2 Development of Transmission Plan.**

- (a) In accordance with the schedule and procedures in the Business Practice Manual, the CAISO will post a draft Transmission Plan. The CAISO will subsequently conduct a stakeholder conference regarding the draft Transmission Plan and solicit comments, consistent with the timelines and procedures set forth in the Business Practice Manual. Additional stakeholder meetings, web conferences, or teleconferences may be scheduled as needed. All stakeholder meetings, web conferences, or teleconferences shall be noticed by Market Notice and such notice shall be posted to the CAISO Website. After consideration of comments, the CAISO will post a final Transmission Plan to the CAISO Website.
- (b) The draft and final Transmission Plan may include, but is not limited to: (1) the results of technical studies performed under the Study Plan; (2) determinations, recommendations, and justifications for the need, according to Section 24.1 of this Appendix EE, for identified transmission upgrades and additions; (3) assessments of transmission upgrades and additions not proposed under Section 24.1 of this Appendix EE and for which need has not been formally determined by the CAISO Governing Board or management, as applicable, under Section 24.1 of this Appendix EE, but which have been identified by the CAISO as potential solutions to transmission needs studied during the Transmission Planning Process cycle; (4) results of Economic Planning Studies performed during the Transmission Planning Process cycle; (5) an update on the status of transmission upgrades or additions previously approved by the CAISO, including identification of mitigation plans, if necessary, to address any potential delay in the anticipated completion of an approved transmission upgrade or addition; and (6) to the extent available, the results of Interconnection Studies.



**Attachment A2 – Clean Sheets**  
**Generation Interconnection Process Reform Amendment Filing**

**Currently Effective CAISO Tariff**

**CAISO TARIFF APPENDIX GG**  
**Large Generator Interconnection Procedures (LGIP)**  
**for Interconnection Requests in a Queue Cluster Window**

**Large Generator  
Interconnection Procedures (LGIP)**

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## **Section 1 Objectives and Definitions.**

### **1.1 Objectives and Applicability.**

The objective of this LGIP is to implement the requirements for Large Generating Facility interconnections to the CAISO Controlled Grid. This LGIP applies to Interconnection Requests assigned to a Queue Cluster Window pursuant to the terms of this CAISO Tariff for the performance of its Interconnection Studies.

### **1.2 Definitions.**

#### **1.2.1 Master Definitions Supplement.**

Unless the context otherwise requires, any word or expression defined in the Master Definitions Supplement, Appendix A to the CAISO Tariff, shall have the same meaning where used in this LGIP. References to LGIP are to this Appendix GG.

#### **1.2.2 Special Definitions for this LGIP.**

In this LGIP, the following words and expressions shall have the meanings set opposite them:

**“Confidential Information”** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, subject to Section 13.1 of this LGIP.

**“Dispute Resolution”** shall mean the procedure set forth in this LGIP for resolution of a dispute between the Parties.

**“Force Majeure”** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**“Governmental Authority”** shall mean any federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, CAISO, or Participating TO, or any Affiliate thereof.

**“Party” or “Parties”** shall mean the CAISO, Participating TO(s), Interconnection Customer or the applicable combination of the above.

**“Reasonable Efforts”** shall mean, with respect to an action required to be attempted or taken by a Party under the Large Generator Interconnection Procedures, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**“Roles and Responsibilities Agreement”** shall mean the Agreement for the Allocation of Responsibilities with Regard to Large Generator Interconnection Procedures and Interconnection Study Agreements, a *pro forma* version of which is attached to this LGIP.

## **Section 2      Scope and Application.**

### **2.1      Application of Large Generator Interconnection Procedures.**

Sections 2 through 13 of this LGIP apply to processing an Interconnection Request pertaining to a Generating Facility assigned to a Queue Cluster Window pursuant to the terms of this CAISO Tariff for the performance of its Interconnection Studies. Appendix 2 of this LGIP sets forth exceptions to the provisions of this LGIP that apply to processing an Interconnection Request pertaining to a Generating Facility that meets the criteria set forth in LGIP Appendix 2.

### **2.2      Comparability.**

The CAISO shall receive, process, and analyze Interconnection Requests in a timely manner as set forth in this LGIP. The CAISO will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers as set forth in this LGIP, whether the Generating Facilities are owned by a Participating TO, its subsidiaries, or Affiliates or others.

### **2.3      Interconnection Base Case Data.**

For each Interconnection Study Cycle, the CAISO, in coordination with applicable Participating TO(s), shall publish updated Interconnection Base Case Data, including, as applicable, separate Interconnection Base Case Data for each Group Study to reflect system conditions particular to the Group Study, to a secured section of the CAISO Website: (1) prior to the Phase I Interconnection Study with the Generation reflected in valid Interconnection Requests submitted in the Queue Cluster Window for the Interconnection Study Cycle; (2) after the Phase I Interconnection Study with the Generation reflected in valid Interconnection Requests submitted in the Queue Cluster Window for the Interconnection Study Cycle, and the identified preliminary transmission upgrades or additions, (3) prior to the Phase II Interconnection Study, including all remaining Generation from the Phase I Interconnection Study for the Interconnection Study Cycle; and (4) after the Phase II Interconnection Study, including all remaining Generation from the applicable Phase I Interconnection Study and the identified transmission upgrades and additions for the Interconnection Study Cycle.

Interconnection Base Case Data shall not include information subject to the confidentiality provisions in LGIP Section 13.1.

The CAISO shall require current and former Interconnection Customers, Market Participants, and electric utility regulatory agencies within California to sign a CAISO confidentiality agreement and, where the current or former Interconnection Customer or Market Participant is not a member of WECC, or its successor, an appropriate form of agreement with WECC, or its successor, as necessary. All other entities or persons seeking Interconnection Base Case Data must satisfy the foregoing requirements as well all requirements under 18 C.F.R. Section 388.113 for obtaining the release of Critical Energy Infrastructure Information (as that term is defined by FERC).



## **2.4 Interconnection Service and Studies.**

### **2.4.1 No Applicability to Transmission Service.**

Nothing in this LGIP shall constitute a request for transmission service or confer upon an Interconnection Customer any right to receive transmission service.

### **2.4.2 The Product.**

Interconnection Service allows the Interconnection Customer to connect the Large Generating Facility to the CAISO Controlled Grid and be eligible to deliver the Large Generating Facility's output using the available capacity of the CAISO Controlled Grid. Interconnection Service does not in and of itself convey any right to deliver electricity to any specific customer or point of delivery or rights to any specific MW of available capacity on the CAISO Controlled Grid.

### **2.4.3 The Interconnection Studies.**

The Interconnection Studies consist of a Phase I Interconnection Study and a Phase II Interconnection Study, which will include, but not be limited to, short circuit/fault duty, steady state (thermal and voltage) and stability analyses. The Interconnection Studies will identify direct Interconnection Facilities and required Reliability Network Upgrades necessary to mitigate thermal overloads and voltage violations, and address short circuit, stability, and reliability issues associated with the requested Interconnection Service.

The Interconnection Studies will also identify Delivery Network Upgrades to allow the full output of a Large Generating Facility selecting Full Capacity Deliverability Status, and, as applicable, the maximum allowed output of the interconnecting Large Generating Facility without one or more Delivery Network Upgrades in accordance with the On-Peak Deliverability Assessment and Off-Peak Deliverability Assessment set forth in LGIP Section 6.3.2.

## **Section 3 Interconnection Requests.**

### **3.1 General.**

Pursuant to CAISO Tariff Section 25.1, an Interconnection Customer shall submit to the CAISO an Interconnection Request in the form of Appendix 1 to this LGIP. The CAISO will forward a copy of the Interconnection Request to the applicable Participating TO within three (3) Business Days of receipt.

The Interconnection Customer shall submit a separate Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. The Interconnection Customer must submit a deposit with each Interconnection Request even when more than one request is submitted for a single site. An Interconnection Request to evaluate one site at two different voltage levels shall be treated as two Interconnection Requests.

**3.2 Roles and Responsibilities.**

- (a) Each Interconnection Request will be subject to the direction and oversight of the CAISO. The CAISO will conduct or cause to be performed the required Interconnection Studies and any additional studies the CAISO determines to be reasonably necessary, and will direct the applicable Participating TO to perform portions of studies where the Participating TO has specific and non-transferable expertise or data and can conduct the studies more efficiently and cost effectively than the CAISO. The CAISO will coordinate with Affected System Operators in accordance with LGIP Section 3.7.
- (b) The CAISO will complete or cause to be completed all studies as required within the timelines provided in this LGIP. Any portion of the studies performed at the direction of the CAISO by the Participating TOs or by a third party shall also be completed within timelines provided in this LGIP.
- (c) The CAISO has established a *pro forma* Roles and Responsibilities Agreement, attached hereto as Appendix 4 and incorporated herein by reference, for execution by the CAISO and the applicable Participating TOs.
- (d) Each Interconnection Customer shall pay the actual costs of all Interconnection Studies, and any additional studies the CAISO determines to be reasonably necessary in response to the Interconnection Request. The CAISO shall reimburse the Participating TO for the actual cost of any portion of all Interconnection Studies that such Participating TO performs at the direction of the CAISO.

**3.3 Queue Cluster Windows.**

Interconnection Requests must be submitted during a Queue Cluster Window. Separate Queue Cluster Windows shall be established as follows: (i) as provided for in LGIP Appendix 2, Section 1.1; (ii) opening on June 2, 2008 and closing on July 31, 2009; (iii) opening on October 1, 2009 and closing on January 31, 2010; and (iv) thereafter, each calendar year shall have two Queue Cluster Windows with opening and closing dates as set forth in the Business Practice Manual.

Any changes to the Queue Cluster Window interval and opening or closing dates set forth in the Business Practice Manual shall be made in accordance with CAISO Tariff Section 22.11.

**3.4 [NOT USED]**

**3.5 Processing of Interconnection Request.**

### **3.5.1 Initiating an Interconnection Request.**

To initiate an Interconnection Request, except as set forth in LGIP Section 3.5.1.1, the Interconnection Customer must submit during a Queue Cluster Window all of the following: (i) a \$250,000 Interconnection Study Deposit, (ii) a completed application in the form of LGIP Appendix 1, including requested deliverability status, preferred Point of Interconnection and voltage level, and all other required technical data, and (iii) demonstration of Site Exclusivity or a posting of a Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity, at a minimum, must be through the Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility.

#### **3.5.1.1 Initiating an Interconnection Request for Certain Small and Existing Generating Facilities.**

An Interconnection Customer submitting an Interconnection Request relating to (a) a Small Generating Facility seeking a Deliverability Assessment or (b) a Generating Facility, subject to the LGIP in accordance with CAISO Tariff Section 25.1.1, that has achieved Commercial Operation prior to the date of the Interconnection Request, and is seeking to increase the capacity of the Generating Facility by less than 20 MW, must submit during a Queue Cluster Window all of the following: (i) a \$100,000 Interconnection Study Deposit, (ii) a completed application in the form of LGIP Appendix 1, including requested deliverability status, preferred Point of Interconnection and voltage level, and all other required technical data, and (iii) demonstration of Site Exclusivity, which for a Generation Facility under (b) above shall be Site Exclusivity sufficient to accommodate the added capacity, or a posting of an additional Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity, at a minimum, must be through the Commercial Operation Date of the new Generating Facility or increase in capacity of the existing Generating Facility.

#### **3.5.1.2 Use of Interconnection Study Deposit.**

The CAISO shall deposit all Interconnection Study Deposits in an interest bearing account at a bank or financial institution designated by the CAISO. The Interconnection Study Deposit shall be applied to pay for prudent costs incurred by the CAISO, the Participating TOs, or third parties at the direction of the CAISO or Participating TOs, as applicable, to perform and administer the Interconnection Studies.

The Interconnection Study Deposits shall be refundable as follows:

- (a) Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under LGIP Section 3.8 on or before thirty (30) calendar days following the Scoping Meeting, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceed the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.

- (b) Should an Interconnection Request made under LGIP Section 3.5.1 be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under LGIP Section 3.8 more than thirty (30) calendar days after the Scoping Meeting, but on or before thirty (30) calendar days following the Results Meeting for the Phase I Interconnection Study, the CAISO shall refund to the Interconnection Customer the difference between (i) the Interconnection Customer's Interconnection Study Deposit and (ii) the greater of the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf or \$100,000, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal.
- (c) Should an Interconnection Request made under LGIP Section 3.5.1.1 be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under LGIP Section 3.8 more than thirty (30) calendar days after the Scoping Meeting, but on or before thirty (30) calendar days following the Results Meeting for the Phase I Interconnection Study, the CAISO shall refund to the Interconnection Customer the difference between (i) the Interconnection Customer's Interconnection Study Deposit and (ii) the greater of the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf or \$50,000, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal.
- (d) Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under LGIP Section 3.8 at any time more than thirty (30) calendar days after the Results Meeting for the Phase I Interconnection Study, the Interconnection Study Deposit shall be non-refundable.
- (e) Upon execution of an LGIA by an Interconnection Customer, the CAISO and the applicable Participating TOs, or the approval by FERC of an unexecuted LGIA, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceeds the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.

Notwithstanding the foregoing, an Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request during an Interconnection Study Cycle shall be obligated to pay to the CAISO all costs in excess of the Interconnection Study Deposit that have been prudently incurred or irrevocably have been committed to be incurred with respect to that Interconnection Request prior to withdrawal. The CAISO will reimburse the applicable Participating TO(s) or third parties, as applicable, for all work performed on behalf of the withdrawn Interconnection Request at the CAISO's direction. The Interconnection Customer must pay all monies due before it is allowed to obtain any Interconnection Study data or results.

All non-refundable portions of the Interconnection Study Deposit that exceed the costs the CAISO, Participating TOs, or third parties have incurred on the Interconnection Customer's behalf shall be treated in accordance with CAISO Tariff Section 37.9.4.

### **3.5.1.3 Obligation for Study Costs.**

Except as otherwise provided in LGIP Section 3.5.1.2, the CAISO shall charge and the Interconnection Customer(s) shall pay the actual costs of the Interconnection Studies. Where an Interconnection Study is performed by means of a Group Study, the cost of the Group Study will be charged pro rata to each Interconnection Request assigned to the Group Study. The cost of Interconnection Studies performed for an individual Interconnection Request, not part of a Group Study, will be charged solely to the Interconnection Customer that submitted the Interconnection Request.

The CAISO shall issue invoices for Interconnection Studies that shall include a detailed and itemized accounting of the cost of each Interconnection Study. The CAISO shall draw from the Interconnection Study Deposit any undisputed costs within thirty (30) calendar days of issuance of an invoice. Whenever the actual cost of performing the Interconnection Studies exceeds the Interconnection Study Deposit, the Interconnection Customer shall pay the undisputed difference in accordance with the CAISO issued invoice within thirty (30) calendar days. The CAISO shall not be obligated to continue to have any studies conducted unless the Interconnection Customer has paid all undisputed amounts in compliance herewith. In the event an Interconnection Study, or portions thereof, is performed by the CAISO, the Interconnection Customer shall pay only the costs of those activities performed by the Participating TO to adequately review or validate that Interconnection Study or portions thereof.

### **3.5.1.4 Use of Site Exclusivity Deposit.**

The CAISO shall deposit all Site Exclusivity Deposits in an interest bearing account at a bank or financial institution designated by the CAISO. The Site Exclusivity Deposit shall be refundable to the Interconnection Customer at any time upon demonstration of Site Exclusivity or the Interconnection Request is withdrawn by the Interconnection Customer or deemed withdrawn by the CAISO by written notice under LGIP Section 3.8. The refund of the Site Exclusivity Deposit shall include interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal. The Site Exclusivity Deposit shall continue to be required after the Interconnection Customer either executes an LGIA or requests the filing of an unexecuted LGIA under LGIP Section 11 if Site Exclusivity has not been demonstrated.

### **3.5.1.5 Proposed Commercial Operation Date.**

The proposed Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility shall not exceed seven years from the date the Interconnection Request is received by the CAISO, unless the Interconnection Customer demonstrates, and the applicable Participating TO(s) and the CAISO agree, such agreement not to be unreasonably withheld, that engineering, permitting and construction of the new Large Generating Facility or increase in capacity of the existing Generating Facility will take longer than the seven year period.

### **3.5.2 Validation of Interconnection Request.**

#### **3.5.2.1 Acknowledgment of Interconnection Request.**

The CAISO shall notify the Interconnection Customer within six (6) Business Days of receipt of the Interconnection Request, which notice shall state whether the Interconnection Request is deemed valid.

#### **3.5.2.2 Deficiencies in Interconnection Request.**

An Interconnection Request will not be considered to be a valid request until all items in LGIP Section 3.5.1 have been received and deemed valid by the CAISO. If an Interconnection Request fails to meet the requirements set forth in LGIP Section 3.5.1, the CAISO shall include in its notification to the Interconnection Customer under LGIP Section 3.5.2.1 the reasons for such failure and that the Interconnection Request does not constitute a valid request. The Interconnection Customer shall provide the CAISO the additional requested information needed to constitute a valid request. Whenever additional requested information is provided by the Interconnection Customer, the CAISO shall notify the Interconnection Customer within three (3) Business Days of receipt of the additional requested information whether the Interconnection Request is valid. If the Interconnection Request continues to fail to meet the requirements set forth in LGIP Section 3.5.1, the CAISO shall include in its notification to the Interconnection Customer the reasons for such failure. If an Interconnection Request has not been deemed valid, the Interconnection Customer must submit all information necessary to meet the requirements of LGIP Section 3.5.1 no later than twenty (20) calendar days after the close of the applicable Queue Cluster Window or ten (10) calendar days after the CAISO first provided notice that the Interconnection Request was not valid, whichever is later. Interconnection Requests that have not met the requirements of LGIP Section 3.5.1 within twenty (20) calendar days after the close of the applicable Queue Cluster Window or ten (10) calendar days after the CAISO first provided notice that the Interconnection Request was not valid, whichever is later, will not be included in Interconnection Study Cycle and will be deemed invalid.

Interconnection Requests deemed invalid under this LGIP Section 3.5.2.2 are not subject to LGIP Section 3.8. Interconnection Customers with invalid Interconnection Request under this LGIP Section 3.5.2.2 may seek relief under LGIP Section 13.5 by so notifying the CAISO within two (2) Business Days of the notice of invalidity.

### **3.6 Internet Posting.**

The CAISO will maintain on the CAISO Website a list of all Interconnection Requests. The list will identify, for each Interconnection Request: (i) the maximum summer and winter megawatt electrical output; (ii) the location by county and state; (iii) the station or transmission line or lines where the interconnection will be made; (iv) the most recent projected Commercial Operation Date; (v) the status of the Interconnection Request, including whether it is active or withdrawn; (vi) the availability of any studies related to the Interconnection Request; (vii) the date of the Interconnection Request; (viii) the type of Generating Facility to be constructed (e.g., combined cycle, combustion turbine, wind turbine, and fuel type); and (ix) requested deliverability status.

Except in the case of an Affiliate, the list will not disclose the identity of the Interconnection Customer until the Interconnection Customer executes an LGIA or requests that the applicable Participating TO(s) and the CAISO file an unexecuted LGIA with FERC. The CAISO shall post on the CAISO Website an advance notice whenever a Scoping Meeting will be held with an Affiliate of a Participating TO.

The CAISO shall post to the CAISO Website any deviations from the study timelines set forth herein. The CAISO shall further post to the CAISO Website non-confidential portions of the Phase I Interconnection Study following the final Results Meeting and non-confidential portions of the Phase II Interconnection Study no later than publication of the final Transmission Plan under CAISO Tariff Section 24.2.5.2 in Appendix EE.

### **3.7 Coordination with Affected Systems.**

The CAISO will notify the Affected System Operators that are potentially affected by the Interconnection Customer's Interconnection Request or Group Study within which the Interconnection Customer's Interconnection Request will be studied. The CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System Operators, to the extent possible, and, if possible, the CAISO will include those results (if available) in its applicable Interconnection Study within the time frame specified in this LGIP. The CAISO will include such Affected System Operators in all meetings held with the Interconnection Customer as required by this LGIP. The Interconnection Customer will cooperate with the CAISO in all matters related to the conduct of studies and the determination of modifications to Affected Systems, including signing separate study agreements with Affected System owners and paying for necessary studies. An entity which may be an Affected System shall cooperate with the CAISO in all matters related to the conduct of studies and the determination of modifications to Affected Systems.

### **3.8 Withdrawal.**

The Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to the CAISO, and the CAISO will notify the applicable Participating TO(s) and Affected System Operators, if any, within three (3) Business Days of receipt of such a notice. In addition, after confirmation by the CAISO of a valid Interconnection Request under LGIP Section 3.5.2, if the Interconnection Customer fails to adhere to all requirements of this LGIP, except as provided in LGIP Section 13.5 (Disputes), the CAISO shall deem the Interconnection Request to be withdrawn and shall provide written notice to the Interconnection Customer within five (5) Business Days of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Upon receipt of such written notice, the Interconnection Customer shall have five (5) Business Days in which to respond with information or action that either cures the deficiency or supports its position that the deemed withdrawal was erroneous and notifies the CAISO of its intent to pursue Dispute Resolution.

Withdrawal shall result in the removal of the Interconnection Request from the Interconnection Study Cycle. If an Interconnection Customer disputes the withdrawal and removal from the Interconnection Study Cycle and has elected to pursue Dispute Resolution, the Interconnection Customer's Interconnection Request will not be considered in any ongoing Interconnection Study during the Dispute Resolution process.

In the event of such withdrawal, the CAISO, subject to the provisions of LGIP Sections 13.1 and 3.5.1.2, shall provide, at the Interconnection Customer's request, all information that the CAISO developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.

### **3.9 Transferability of Interconnection Request.**

An Interconnection Customer may transfer its Interconnection Request to another entity only if such entity acquires the specific Generating Facility identified in the Interconnection Request and the Point of Interconnection does not change.

### **Section 4 Large Generator Interconnection Study Process Agreement.**

Within thirty (30) calendar days of the close of the Queue Cluster Window, the CAISO shall provide to each Interconnection Customer with a valid Interconnection Request received during the Queue Cluster Window a *pro forma* Large Generator Interconnection Study Process Agreement in the form set forth in Appendix 3 of this LGIP. The *pro forma* Large Generator Interconnection Study Process Agreement shall specify that the Interconnection Customer is responsible for the actual cost of the Interconnection Studies, including reasonable administrative costs, and all requirements of this LGIP. Within three (3) Business Days following the Scoping Meeting, the Interconnection Customer shall specify for inclusion in the attachment to the Large Generator Interconnection Study Process Agreement the Point of Interconnection for the Phase I Interconnection Study. Within ten (10) Business Days following the CAISO's receipt of such designation, the CAISO, in coordination with the applicable Participating TOs, shall provide to the Interconnection Customer a signed Large Generator Interconnection Study Process Agreement. The Interconnection Customer shall execute and deliver to the CAISO the Large Generator Interconnection Study Process Agreement no later than thirty (30) calendar days after the Scoping Meeting.

### **Section 5 Scoping Meeting.**

Within five (5) Business Days after the CAISO notifies the Interconnection Customer of a valid Interconnection Request, the CAISO shall establish a date agreeable to the Interconnection Customer and the applicable Participating TO(s) for the Scoping Meeting. All Scoping Meetings shall occur no later than sixty (60) calendar days after the close of the Queue Cluster Window, unless otherwise mutually agreed upon by the Parties. The CAISO shall determine whether the Interconnection Request is at or near the boundary of an affected Participating TO(s) PTO Service Territory or of any other Affected System(s) so as to potentially affect such third parties. If such a determination is made, the CAISO shall invite the affected Participating TO(s), and/or Affected System Operator(s) in accordance with LGIP Section 3.7, to the Scoping Meeting by informing such third parties of the time and place of the scheduled Scoping Meeting as soon as practicable.



The purpose of the Scoping Meeting shall be to discuss reasonable Commercial Operation Dates and alternative interconnection options, to exchange information including any transmission data that would reasonably be expected to impact such interconnection options, to analyze such information and to determine the potential feasible Points of Interconnection and eliminate alternatives given resources and available information. The applicable Participating TO(s) and the CAISO will bring to the meeting, as reasonably necessary to accomplish its purpose, the following: (a) such already available technical data, including, but not limited to, (i) general facility loadings, (ii) general instability issues, (iii) general short circuit issues, (iv) general voltage issues, and (v) general reliability issues, and (b) general information regarding the number, location, and capacity of other Interconnection Requests in the Interconnection Study Cycle that may potentially form a Group Study with the Interconnection Customer's Interconnection Request.

The Interconnection Customer will bring to the Scoping Meeting, in addition to the technical data in Attachment A to LGIP Appendix 1, any system studies previously performed. The applicable Participating TO(s), the CAISO and the Interconnection Customer will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. On the basis of the meeting, the Interconnection Customer shall designate its Point of Interconnection. The duration of the meeting shall be sufficient to accomplish its purpose.

The CAISO shall prepare minutes from the meeting, verified by the Interconnection Customer and the other attendees, that will include, at a minimum, discussions among the applicable Participating TO(s) and the CAISO of the expected results and a good faith estimate of the costs for the Phase I Interconnection Study.

## **Section 6 Interconnection Studies.**

### **6.1 Grouping Interconnection Requests.**

At the CAISO's option, and in coordination with the applicable Participating TO(s), an Interconnection Request received during a particular Queue Cluster Window may be studied individually or in a Group Study for the purpose of conducting one or more of the analyses forming the Interconnection Studies. For each Interconnection Study within an Interconnection Study Cycle, the CAISO may develop one or more Group Studies. A Group Study will include, at the CAISO's sole judgment after coordination with the applicable Participating TO(s), Interconnection Requests that electrically affect one another with respect to the analysis being performed without regard to the nature of the underlying Interconnection Service. The CAISO may also, in its sole judgment after coordination with the applicable Participating TO(s), conduct an Interconnection Study for an Interconnection Request separately to the extent warranted by Good Utility Practice based upon the electrical remoteness of the proposed Large Generating Facility from other Large Generating Facilities with Interconnection Requests in the same Queue Cluster Window.

An Interconnection Request's inclusion in a Group Study will not relieve the CAISO or Participating TO(s) from meeting the timelines for conducting the Phase I Interconnection Study provided in the LGIP. Group Studies shall be conducted in such a manner to ensure the efficient implementation of the applicable regional transmission expansion plan in light of the transmission system's capabilities at the time of each study.

## **6.2 Scope and Purpose of Phase I Interconnection Study.**

The Phase I Interconnection Study shall (i) evaluate the impact of all Interconnection Requests received during the Queue Cluster Window on the CAISO Controlled Grid, (ii) preliminarily identify all Network Upgrades needed to address the impacts on the CAISO Controlled Grid of the Interconnection Requests, (iii) preliminarily identify for each Interconnection Request required Interconnection Facilities, (iv) assess the Point of Interconnection selected by each Interconnection Customer and potential alternatives to evaluate potential efficiencies in overall transmission upgrades costs, (v) establish the maximum cost responsibility for Network Upgrades assigned to each Interconnection Request in accordance with LGIP Section 6.3, and (vi) provide a good faith estimate of the cost of Interconnection Facilities for each Interconnection Request.

The Phase I Interconnection Study will consist of a short circuit analysis, a stability analysis to the extent the CAISO and applicable Participating TO(s) reasonably expect transient or voltage stability concerns, a power flow analysis, including off-peak analysis, and an On-Peak and Off-Peak Deliverability Assessment(s), as applicable, in accordance with LGIP Section 6.3.2. The Phase I Interconnection Study will state for each Group Study or Interconnection Request studied individually (i) the assumptions upon which it is based, (ii) the results of the analyses, and (iii) the requirements or potential impediments to providing the requested Interconnection Service to all Interconnection Requests in a Group Study or to the Interconnection Request studied individually. The Phase I Interconnection Study will provide, without regard to the requested Commercial Operation Dates of the Interconnection Requests, a list of Network Upgrades to the CAISO Controlled Grid that are preliminarily identified as required as a result of the Interconnection Requests in a Group Study or as a result of any Interconnection Request studied individually and Participating TO's Interconnection Facilities associated with each Interconnection Request, and an estimate of any other financial impacts (i.e., on Local Furnishing Bonds).

## **6.3 Identification and Cost Allocation Methods for Network Upgrades in Phase I Interconnection Study.**

### **6.3.1 Reliability Network Upgrades.**

The CAISO, in coordination with the applicable Participating TO(s), will perform short circuit and stability analyses for each Interconnection Request either individually or as part of a Group Study to preliminarily identify the Reliability Network Upgrades needed to interconnect the Large Generating Facilities to the CAISO Controlled Grid. The CAISO, in coordination with the applicable Participating TO(s), shall also perform power flow analyses, under a variety of system conditions, for each Interconnection Request either individually or as part of a Group Study to identify Reliability Criteria violations, including applicable thermal overloads, that must be mitigated by Reliability Network Upgrades.

The cost of all Reliability Network Upgrades identified in the Phase I Interconnection Study shall be estimated in accordance with LGIP Section 6.4. The estimated costs of Reliability Network Upgrades identified as a result of an Interconnection Request studied separately shall be assigned solely to that Interconnection Request. The estimated costs of Reliability Network Upgrades identified through a Group Study shall be assigned to all Interconnection Requests in that Group Study pro rata on the basis of the maximum megawatt electrical output of each proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed by the Interconnection Customer in its Interconnection Request.

### **6.3.2 Delivery Network Upgrades.**

#### **6.3.2.1 The On-Peak Deliverability Assessment.**

The CAISO, in coordination with the applicable Participating TO(s), shall perform an On-Peak Deliverability Assessment for Interconnection Customers selecting Full Capacity Deliverability Status in their Interconnection Requests. The On-Peak Deliverability Assessment shall determine the Interconnection Customer's Large Generating Facility's ability to deliver its Energy to the CAISO Controlled Grid under peak load conditions, and identify preliminary Delivery Network Upgrades required to provide the Large Generating Facility with Full Capacity Deliverability Status. The preliminary Delivery Network Upgrades identified by the On-Peak Deliverability Assessment will be used to establish the maximum cost responsibility for Delivery Network Upgrades for each Interconnection Customer selecting Full Capacity Deliverability Status. Deliverability of a new Large Generating Facility will be assessed on the same basis as all other existing resources interconnected to the CAISO Controlled Grid.

The On-Peak Deliverability Assessment will identify the Network Upgrades that are required to enable the Large Generating Facility of each Interconnection Customer requesting Full Capacity Deliverability Status to meet the requirements for deliverability. Deliverability requires that the Generating Facility Capacity, as set forth in the Interconnection Request, can be delivered to the aggregate of Load on the CAISO Controlled Grid, consistent with Reliability Criteria, under CAISO Controlled Grid peak load and Contingency conditions, and assuming the aggregate output of existing Generating Facilities with established Net Qualifying Capacity values and other Large Generating Facilities in the Interconnection Study Cycle seeking Full Capacity Deliverability Status identified within the On-Peak Deliverability Assessment based on the effect of transmission Constraints.

The On-Peak Deliverability Assessment will further perform an analysis to estimate the MW of deliverable generation capacity for the individual or Group Study if the highest cost Delivery Network Upgrade component were removed from the preliminary Delivery Network Upgrade plan, or, at the CAISO's sole discretion, if any other identified Delivery Network Upgrade component(s) were removed from the preliminary Delivery Network Upgrade plan. This information is provided to allow Interconnection Customers to address at the Results Meeting potential modifications under LGIP Section 6.7.2 or change the Interconnection Request's Full Capacity Deliverability Status for purposes of financing under LGIP Section 12.3.1.

The methodology for the On-Peak Deliverability Assessment will be published on the CAISO Website or, when effective, included in a CAISO Business Practice Manual. The On-Peak Deliverability Assessment does not convey any right to deliver electricity to any specific customer or Delivery Point.

The cost of all Delivery Network Upgrades identified in the On-Peak Deliverability Assessment as part of a Phase I Interconnection Study shall be estimated in accordance with LGIP Section 6.4. The estimated costs of Delivery Network Upgrades identified in the On-Peak Deliverability Assessment shall be assigned to all Interconnection Requests selecting Full Capacity Deliverability Status based on the flow impact of each such Large Generating Facility on the Delivery Network Upgrades as determined by the Generation distribution factor methodology set forth in the On-Peak Deliverability Assessment methodology.

### **6.3.2.2 Off-Peak Deliverability Assessment.**

The CAISO, in coordination with the applicable Participating TO(s), shall perform an Off-Peak Deliverability Assessment for Interconnection Customers selecting Full Capacity Deliverability Status in their Interconnection Requests to determine Delivery Network Upgrades in addition to those identified in the On-Peak Deliverability Assessment, if any, for a Group Study or individual Phase I Interconnection Study that includes one or more Location Constrained Resource Interconnection Generators (LCRIG), where the fuel source or source of energy for the LCRIG substantially occurs during off-peak conditions. Delivery Network Upgrades will be identified under this Section to ensure that the full maximum megawatt electrical output of each proposed new LCRIG or the amount of megawatt increase in the generating capacity of each existing LCRIG as listed by the Interconnection Customer in its Interconnection Request, whether studied individually or as a Group Study, is deliverable to the aggregate of Load on the CAISO Controlled Grid under the Generation dispatch conditions studied. The methodology for the Off-Peak Deliverability Assessment will be published on the CAISO Website or, if applicable, included in a CAISO Business Practice Manual.

At the CAISO's discretion, an additional Off-Peak Deliverability Assessment may be performed to estimate the MW of deliverable generation capacity from the LCRIG studied individually or from the Group Study if the highest cost, or any other, Delivery Network Upgrade component were removed from the preliminary Delivery Network Upgrade plan. This information is provided to allow Interconnection Customers to address at the Results Meeting potential modifications under LGIP Section 6.7.2 or change the Interconnection Request's Full Capacity Deliverability Status for purposes of financing under LGIP Section 12.3.1.

The cost of all Delivery Network Upgrades identified in the Off-Peak Deliverability Assessment as part of Phase I Interconnection Study shall be estimated in accordance with LGIP Section 6.4. The estimated costs of Delivery Network Upgrades identified in the Off-Peak Deliverability Assessment shall be assigned to each Interconnection Request included in the Group Study or studied individually based on the flow impact of each such LCRIG on the Delivery Network Upgrades as determined by the Generation distribution factor methodology set forth in the Off-Peak Deliverability Assessment methodology.

**6.4 Use of Per Unit Costs to Estimate Network Upgrade Costs.**

Prior to the commencement of the initial Queue Cluster Window for each calendar year, each Participating TO, under the direction of the CAISO, shall publish per unit costs for facilities generally required to interconnect Generation to their respective systems. These per unit costs shall reflect the anticipated cost of procuring and installing such facilities during the current Interconnection Study Cycle, and may vary among Participating TOs and within a PTO Service Territory based on geographic and other cost input differences, and should include an annual adjustment for the following ten (10) years to account for the anticipated timing of procurement to accommodate a potential range of Commercial Operation Dates of Interconnection Requests in the Interconnection Study Cycle. The per unit costs will be used to develop the cost of Reliability Network Upgrades, Delivery Network Upgrades and Participating TO's Interconnection Facilities under this LGIP Section 6.

Prior to adoption and publication of final per unit costs for use in the Interconnection Study Cycle, the CAISO shall publish to the CAISO Website draft per unit costs, including non-confidential information regarding the bases therefore, hold a stakeholder meeting to address the draft per unit costs, and permit stakeholders to provide comments on the draft per unit costs.

**6.5 Phase I Interconnection Study Costs Form the Basis of Interconnection Financial Security.**

The costs assigned to Interconnection Customers for Network Upgrades under this Section 6 of the LGIP shall establish the maximum value for the Interconnection Financial Security required from each Interconnection Customer under LGIP Section 9 for such Network Upgrades. In contrast, the costs assigned to Interconnection Customers for Participating TO's Interconnection Facilities under this Section 6 of the LGIP are estimates only that establish the basis for the initial Interconnection Financial Security required from each Interconnection Customer under LGIP Section 9.2.

**6.6 Phase I Interconnection Study Procedures.**

The CAISO shall coordinate the Phase I Interconnection Study with applicable Participating TO(s) pursuant to LGIP Section 3.2 and any Affected System that is affected by the Interconnection Request pursuant to LGIP Section 3.7. Existing studies shall be used to the extent practicable when conducting the Phase I Interconnection Study. The CAISO will coordinate Base Case development with the applicable Participating TOs to ensure the Base Cases are accurately developed. The CAISO shall use Reasonable Efforts to complete and publish to Interconnection Customers the Phase I Interconnection Study report at a maximum within two hundred seventy (270) calendar days after the close of the Queue Cluster Window and approximately one hundred eighty calendar days after the final Scoping Meeting held for the Interconnection Study Cycle; however, each individual study or Group Studies may be completed prior to this maximum time where practicable based on factors, including, but not limited to, the number of Interconnection Requests in the Queue Cluster Window, study complexity, and reasonable availability of subcontractors as provided under LGIP Section 13.2. The

CAISO will share applicable study results with the applicable Participating TO(s) for review and comment and will incorporate comments into the study report. The CAISO will issue a final Phase I Interconnection Study report to the Interconnection Customer. At the time of completion of the Phase I Interconnection Study, the CAISO may, at the Interconnection Customer's request, determine whether the provisions of LGIP Section 7.6 apply.

At any time the CAISO determines that it will not meet the required time frame for completing the Phase I Interconnection Study due to the large number of Interconnection Requests in the Queue Cluster Window, study complexity, or unavailability of subcontractors on a reasonable basis to perform the study in the required time frame, the CAISO shall notify the Interconnection Customers as to the schedule status of the Phase I Interconnection Study and provide an estimated completion date with an explanation of the reasons why additional time is required.

Upon request, the CAISO shall provide the Interconnection Customer all supporting documentation, workpapers and relevant pre-Interconnection Request and post-Interconnection Request power flow, short circuit and stability databases for the Phase I Interconnection Study, subject to confidentiality arrangements consistent with LGIP Section 13.1.

#### **6.7 Phase I Interconnection Study Results Meeting.**

Within thirty (30) calendar days of providing the Phase I Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s), the CAISO and the Interconnection Customer shall hold a Results Meeting to discuss the results of the Phase I Interconnection Study, including assigned cost responsibility.

##### **6.7.1 Commercial Operation Date.**

At the Results Meeting, the Interconnection Customer shall provide a schedule outlining key milestones including environmental survey start date, expected environmental permitting submittal date, expected procurement date of project equipment, back-feed date for project construction, and expected project construction date. This will assist the parties in determining if Commercial Operation Dates are reasonable. If major Interconnection Customer's Interconnection Facilities for the Large Generating Facility have been identified in the Phase I Interconnection Study, such as telecommunications equipment to support a possible special protection system (SPS), distribution feeders to support back feed, new substation, and/or expanded substation work, permitting and material procurement lead times may result in the need to alter the proposed Commercial Operation Date. The Parties may agree to a new Commercial Operation Date. In

addition, where an Interconnection Customer intends to establish Commercial Operation separately for different Electric Generating Units or project phases at its Generating Facility, it may only do so in accordance with an implementation plan agreed to in advance by the CAISO and Participating TO, which agreement shall not be unreasonably withheld. Where the parties cannot agree, the Commercial Operation Date determined reasonable by the CAISO, in coordination with the applicable Participating TO(s), will be used for the Phase II Interconnection Study where the changed Commercial Operation Date is needed to accommodate the anticipated completion, assuming Reasonable Efforts by the applicable Participating TO(s), of necessary Reliability Network Upgrades and/or Participating TO's Interconnection Facilities, pending the outcome of any relief sought by the Interconnection Customer under LGIP Section 13.5. The Interconnection Customer must notify the CAISO within five (5) Business Days following the Results Meeting that it is initiating dispute procedures under LGIP Section 13.5.

#### **6.7.2 Modifications.**

At the Results Meeting, the Interconnection Customer should be prepared to discuss any desired modifications to the Interconnection Request. Within five (5) Business Days following the Results Meeting, the Interconnection Customer shall submit to the CAISO, in writing, modifications to any information provided in the Interconnection Request. The CAISO will forward the Interconnection Customer's modification to the applicable Participating TO(s) within one (1) Business Day of receipt. The Interconnection Customer shall remain eligible for the Phase II Interconnection Study if the modifications are in accordance with LGIP Sections 6.7.2.1 or 6.7.2.2.

Notwithstanding the above, during the course of the Interconnection Studies, the Interconnection Customer, the applicable Participating TO(s), or the CAISO may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes are acceptable to the applicable Participating TO(s), the CAISO, and Interconnection Customer, such acceptance not to be unreasonably withheld, the CAISO shall modify the Point of Interconnection and/or configuration in accordance with such changes without altering the Interconnection Request's eligibility for participating in Interconnection Studies.

- 6.7.2.1** Modifications permitted under this Section 6.7.2 shall include specifically: (a) a decrease in the electrical output (MW) of the proposed project; (b) modifying the technical parameters associated with the Large Generating Facility technology or the Large Generating Facility step-up transformer impedance characteristics; and (c) modifying the interconnection configuration.

**6.7.2.2** For any modification other than those specifically permitted by LGIP Section 6.7.2.1, the Interconnection Customer may first request that the CAISO evaluate whether such modification is a Material Modification. In response to the Interconnection Customer's request, the CAISO, in coordination with the affected Participating TO(s) and, if applicable, any Affected System Operator, shall evaluate the proposed modifications prior to making them and the CAISO shall inform the Interconnection Customer in writing of whether the modifications would constitute a Material Modification. Any change to the Point of Interconnection, except for that specified by the CAISO in an Interconnection Study or otherwise allowed under this LGIP Section 6.7.2, shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

## **Section 7 Phase II Interconnection Study.**

### **7.1 Scope of Phase II Interconnection Study.**

The CAISO, in coordination with the applicable Participating TO(s), will conduct a Phase II Interconnection Study that will incorporate eligible Interconnection Requests from the previous two Phase I Interconnection Studies. The Phase II Interconnection Study shall (i) update, as necessary, analyses performed in the Phase I Interconnection Studies to account for the withdrawal of Interconnection Requests, (ii) identify final Reliability Network Upgrades needed to physically interconnect the Large Generating Facilities, (iii) assign responsibility for financing the identified final Reliability Network Upgrades, (iv) identify, following coordination with the CAISO's Transmission Planning Process, final Delivery Network Upgrades needed to interconnect those Large Generating Facilities selecting Full Capacity Deliverability Status, (v) assign responsibility for financing Delivery Network Upgrades needed to interconnect those Large Generating Facilities selecting Full Capacity Deliverability Status, (vi) identify for each Interconnection Request final Point of Interconnection and Participating TO's Interconnection Facilities and Interconnection Customer's Interconnection Facilities, (vii) provide a +/-20% estimate for each Interconnection Request of the final Participating TO's Interconnection Facilities and Interconnection Customer's Interconnection Facilities, and (viii) optimize in-service timing requirements based on operational studies in order to maximize achievement of the Commercial Operation Dates of the Large Generating Facilities.

With respect to the foregoing items, the Phase II Interconnection Study shall specify and estimate the cost of the equipment, engineering, procurement and construction work, including the financial impacts (i.e., on Local Furnishing Bonds), if any, and schedule for effecting remedial measures that address such financial impacts, needed on the CAISO Controlled Grid to implement the conclusions of the updated Phase II Interconnection Study technical analyses in accordance with Good Utility Practice to physically and electrically connect the Interconnection Customer's Interconnection Facilities to the CAISO Controlled Grid. The Phase II Interconnection Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Participating TO's Interconnection Facilities and Network Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities.



**7.2 Coordination of the Phase II Interconnection Study with the Transmission Planning Process.**

The CAISO shall coordinate the Phase II Interconnection Studies with the CAISO's Transmission Planning Process under, and as defined in, CAISO Tariff Section 24 in Appendix EE. This coordination shall include, but not be limited to:

- (i) consistency, to the maximum extent applicable under Good Utility Practice, between the Interconnection Base Case Data used for performance of the Phase II Interconnection Studies and the Unified Planning Assumptions developed for the Transmission Planning Process, including, but not limited to, data relating to Demand data, network topology, and generation resources;
- (ii) consideration of any conceptual transmission plan(s) developed, but not rejected, in the current or former Transmission Planning Processes intended to access generation development areas as a means to satisfy the Network Upgrade requirements to interconnect Generating Facilities included in the Phase II Interconnection Study;
- (iii) performance of sensitivities within the Transmission Planning Process, including cases considering Generating Facilities included in the Phase II Interconnection Study(ies) to the extent possible, to optimize transmission upgrades developed in the current Transmission Planning Process to achieve System Reliability, economic efficiency, and satisfy the Network Upgrade requirements to interconnect Generating Facilities included in the Phase II Interconnection Study;
- (iv) consideration of future generation development potential in transmission upgrade designs pursuant to criteria developed as part of the Unified Planning Assumptions; and
- (v) consideration of phased development and option value of transmission projects to address uncertainty.

Network Upgrades, apart from detail engineering and final cost determinations, identified in any Phase II Interconnection Study or as part of the Transmission Planning Process that must receive ISO Governing Board approval under Section 24 in Appendix EE of the CAISO Tariff may be subject to Section 24.2.5.2 in Appendix EE of the CAISO Tariff.

Generation projects entering the Phase II Interconnection Study will also be considered in the Unified Planning Assumptions (as defined in CAISO Tariff Appendix EE), as appropriate. Transmission projects proposed through the Phase II Interconnection Study that require CAISO Governing Board approval will be integrated into the stakeholder process under the Transmission Planning Process.

**7.3 Financing of Reliability Network Upgrades.**

The responsibility to finance final Reliability Network Upgrades identified in the Phase II Interconnection Study of an Interconnection Request studied separately shall be

assigned solely to that Interconnection Request up to the cost assignment for Reliability Network Upgrades under LGIP Section 6.3.1. The responsibility to finance final Reliability Network Upgrades identified through a Group Study in the Phase II Interconnection Study shall be assigned to all Interconnection Requests in that Group Study pro rata on the basis of the maximum megawatt electrical output of each proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed by the Interconnection Customer in its Interconnection Request up to the cost assignment for Reliability Network Upgrades under LGIP Section 6.3.1.

#### **7.4 Financing of Delivery Network Upgrades.**

The responsibility to finance all Delivery Network Upgrades identified in the On-Peak Deliverability Assessment and Off-Peak Deliverability Assessment as part of Phase II Interconnection Study shall be assigned to all Interconnection Requests selecting Full Capacity Deliverability Status based on the flow impact of each such Large Generating Facility on each Delivery Network Upgrade as determined by the Generation distribution factor methodology set forth in the On-Peak and Off-Peak Deliverability Assessment methodologies. The financing responsibility shall be up to, but no greater than, the cost assignment for Delivery Network Upgrades for each Interconnection Request under LGIP Sections 6.3.2.1 and 6.3.2.2.

#### **7.5 Phase II Interconnection Study Procedures.**

The CAISO shall coordinate the Phase II Interconnection Study with applicable Participating TO(s) and any Affected System that is affected by the Interconnection Request pursuant to LGIP Section 3.7. Existing studies shall be used to the extent practicable when conducting the Phase II Interconnection Study. The CAISO will coordinate Base Case development with the applicable Participating TOs to ensure the Base Cases are accurately developed. The CAISO shall use Reasonable Efforts to complete and publish to Interconnection Customers the Phase II Interconnection Study report within three hundred thirty (330) calendar days from January 1 of each calendar year. The CAISO will share applicable study results with the applicable Participating TO(s), for review and comment, and will incorporate comments into the study report. The CAISO will issue a final Phase II Interconnection Study report to the Interconnection Customer.

At the request of the Interconnection Customer or at any time the CAISO determines that it will not meet the required time frame for completing the Phase II Interconnection Study, the CAISO shall notify the Interconnection Customer as to the schedule status of the Phase II Interconnection Study and provide an estimated completion date with an explanation of the reasons why additional time is required.

Upon request, the CAISO shall provide the Interconnection Customer all supporting documentation, workpapers and relevant pre-Interconnection Request and post-Interconnection Request power flow, short circuit and stability databases for the Phase II Interconnection Study, subject to confidentiality arrangements consistent with LGIP Section 13.1.

**7.6. Accelerated Phase II Interconnection Study Process.**

The Phase II Interconnection Study shall be completed within one hundred fifty (150) calendar days following the posting of the initial Interconnection Financial Security under LGIP Section 9 where the Interconnection Request meets the following criteria: (i) the Interconnection Request was not grouped with any other Interconnection Requests during the Phase I Interconnection Study or was identified as interconnecting to a point of available transmission during the Phase I Interconnection Study, and (ii) the Interconnection Customer is able to demonstrate that the general Phase II Interconnection Study timeline under LGIP Section 7.5 is not sufficient to accommodate the Commercial Operation Date of the Large Generating Facility.

In addition to the above criteria, the CAISO may apply to FERC in coordination with the Interconnection Customer for a waiver of the timelines in this LGIP to meet the schedule required by an order, ruling, or regulation of the Governor of the State of California, the CPUC, or the CEC.

**7.7 Meeting with the CAISO and Applicable Participating TO(s).**

Within thirty (30) calendar days of providing the final Phase II Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s), the CAISO and the Interconnection Customer shall meet to discuss the results of the Phase II Interconnection Study, including selection of the final Commercial Operation Date.

**Section 8 [NOT USED]**

**Section 9 Interconnection Financial Security.**

**9.1 Types of Interconnection Financial Security.**

The Interconnection Financial Security posted by an Interconnection Customer may be any combination of the following types of Interconnection Financial Security provided in favor of the applicable Participating TO(s):

- (a) an irrevocable and unconditional letter of credit issued by a bank or financial institution that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's;
- (b) an irrevocable and unconditional surety bond issued by an insurance company that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's;
- (c) an unconditional and irrevocable guaranty issued by a company has a credit rating of A or better by Standard and Poors or A2 or better by Moody's;
- (d) a cash deposit standing to the credit of the CAISO and applicable Participating TO(s) in an interest-bearing escrow account maintained at a bank or financial institution that is reasonably acceptable to the CAISO;

- (e) a certificate of deposit in the name of the CAISO issued by a bank or financial institution that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's; or
- (f) a payment bond certificate in the name of the CAISO issued by a bank or financial institution that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's.

Interconnection Financial Security instruments as listed above shall be in such form as the CAISO and applicable Participating TO(s) may reasonably require from time to time by notice to Interconnection Customers or in such other form as has been evaluated and approved as reasonably acceptable by the CAISO and applicable Participating TO(s). The CAISO shall publish and maintain standardized forms related to the types of Interconnection Financial Security listed above on the CAISO Website. The CAISO shall require the use of standardized forms of Interconnection Financial Security to the greatest extent possible. If at any time the guarantor of the Interconnection Financial Security fails to maintain the credit rating required by this LGIP Section 9.1, the Interconnection Customer shall provide to the CAISO replacement Interconnection Financial Security meeting the requirements of this LGIP Section 9.1 within five (5) Business Days of the change in credit rating.

Interest on a cash deposit standing to the credit of the CAISO in an interest-bearing escrow account under subpart (d) of this LGIP Section 9.1 will accrue to the Interconnection Customer's benefit and will be added to the Interconnection Customer's account on a monthly basis.

## **9.2 Initial Posting of Interconnection Financial Security.**

On or before ninety (90) calendar days after publication of the final Phase I Interconnection Study report, Interconnection Customers must post, with notice to the CAISO, two separate Interconnection Financial Security instruments (i) in the amount of twenty percent (20%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study for Network Upgrades, or \$500,000, whichever is greater, and (ii) in the amount of twenty percent (20%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study for Participating TO's Interconnection Facilities. The failure by an Interconnection Customer to timely post, and notify the CAISO of the posting of, the Interconnection Financial Security required by this LGIP Section 9.2 shall result in the Interconnection Request being deemed withdrawn and subject to LGIP Section 3.8.

## **9.3 Second Posting of Interconnection Financial Security.**

On or before one hundred eighty (180) calendar days after publication of the final Phase II Interconnection Study report or at the start of Construction Activities of Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer, whichever is earlier, the Interconnection Customer must post separate Interconnection Financial Security instruments in the total amount of one hundred percent

(100%) of the total cost responsibility assigned to the Interconnection Customer (i) in the final Phase I Interconnection Study for Network Upgrades, if greater than \$500,000, and (ii) in the final Phase II Interconnection Study for Participating TO's Interconnection Facilities. The start date for Construction Activities of Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer must be set forth in the Interconnection Customer's LGIA if that start date is prior to one hundred eighty (180) calendar days after publication of the final Phase II Interconnection Study report. The failure by an Interconnection Customer to timely post the Interconnection Financial Security required by this LGIP Section 9.2 shall constitute grounds for termination of the LGIA pursuant to LGIA Article 2.3.

**9.4 General Effect of Withdrawal of Interconnection Request or Termination of the LGIA on Interconnection Financial Security.**

Except as set forth in LGIP Section 9.4.1, withdrawal of an Interconnection Request or termination of an LGIA shall allow the applicable Participating TO(s) to liquidate the Interconnection Financial Security, or balance thereof, posted by the Interconnection Customer for Network Upgrades at the time of withdrawal. To the extent the amount of the liquidated Interconnection Financial Security plus capital, if any, separately provided by the Interconnection Customer to satisfy its obligation to finance Network Upgrades in accordance with LGIP Section 12.3 exceeds the total cost responsibility for Network Upgrades assigned to the Interconnection Customer by the Phase I Interconnection Study, the applicable Participating TO(s) shall remit to the Interconnection Customer the excess amount.

Withdrawal of an Interconnection Request or termination of an LGIA shall result in the release to the Interconnection Customer of any Interconnection Financial Security posted by the Interconnection Customer for Participating TO's Interconnection Facilities, except with respect to any amounts necessary to pay for costs incurred or irrevocably committed by the applicable Participating TO(s) on behalf of the Interconnection Customer for the Participating TO's Interconnection Facilities and for which the applicable Participating TO(s) has not been reimbursed.

**9.4.1 Conditions for Partial Recovery of Interconnection Financial Security Upon Withdrawal of Interconnection Request or Termination of LGIA.**

A portion of the Interconnection Financial Security shall be released to the Interconnection Customer, consistent with LGIP Section 9.4.2, if the withdrawal of the Interconnection Request or termination of the LGIA occurs for any of the following reasons:

- (a) **Failure to Secure a Power Purchase Agreement.** At the time of withdrawal of the Interconnection Request or termination of the LGIA, the Interconnection Customer demonstrates to the CAISO that it has failed to secure an acceptable power purchase agreement for the Energy or capacity of the Large Generating Facility after a good faith effort to do so. A good faith effort can be established by demonstrating participation in a competitive solicitation process or bilateral negotiations with an entity other than an Affiliate that progressed, at minimum, to the mutual exchange by all counter-parties of proposed term sheets.

- (b) **Failure to Secure a Necessary Permit.** At the time of withdrawal of the Interconnection Request or termination of the LGIA, the Interconnection Customer demonstrates to the CAISO that it has received a final denial from the primary issuing Governmental Authority of any permit or other authorization necessary for the construction or operation of the Large Generating Facility.
- (c) **Increase in the Cost of Participating TO's Interconnection Facilities.** The Interconnection Customer withdraws the Interconnection Request or terminates the LGIA based on an increase of more than 30% or \$300,000, whichever is greater, in the estimated cost of Participating TO's Interconnection Facilities between the Phase I Interconnection Study and the Phase II Interconnection Study.
- (d) **Material Change in Interconnection Customer Interconnection Facilities Created by a CAISO Change in the Point of Interconnection.** The Interconnection Customer withdraws the Interconnection Request or terminates the LGIA based on a material change from the Phase I Interconnection Study in the Point of Interconnection for the Large Generating Facility mandated by the CAISO and included in the final Phase II Interconnection Study. A material change in the Point of Interconnection shall be where Point of Interconnection has moved to (i) a different substation, (ii) a different line on a different right of way, or (iii) a materially different location than previously identified on the same line.

#### **9.4.2 Schedule for Determining Non-Refundable Portion of the Interconnection Financial Security for Network Upgrades.**

##### **9.4.2.1 Up to One Hundred Eighty Days After Final Phase II Interconnection Study Report.**

If, at any time after the initial posting of the Interconnection Financial Security for Network Upgrades under LGIP Section 9.2 and on or before one hundred eighty (180) calendar days after the date of issuance of the final Phase II Interconnection Study report, the Interconnection Customer withdraws the Interconnection Request or terminates the LGIA, as applicable, in accordance with LGIP Section 9.4.1, the applicable Participating TO(s) shall liquidate the Interconnection Financial Security for Network Upgrades under LGIP Section 9.2 and reimburse the Interconnection Customer in an amount of (i) fifty percent (50%) of the value of the posted Interconnection Financial Security for Network Upgrades, or, (ii) if the Interconnection Financial Security has been drawn down to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer, the lesser of the remaining balance of the Interconnection Financial Security or the amount calculated under (i) above. If the Interconnection Customer has separately provided capital apart from the Interconnection Financial Security to finance Pre-Construction Activities for Network Upgrades, the applicable Participating TO(s) will credit the capital provided as if drawn from the Interconnection Financial Security and apply (ii) above.

**9.4.2.2 Between One Hundred Eighty-One Days and Three Hundred Sixty-Five Days After Final Phase II Interconnection Study Report.**

If, at any time between one hundred eighty-one (181) calendar days and three hundred sixty-five (365) calendar days after the date of issuance of the final Phase II Interconnection Study report, the Interconnection Customer withdraws the Interconnection Request or terminates the LGIA, as applicable, in accordance with LGIP Section 9.4.1, the applicable Participating TO(s) shall liquidate the Interconnection Financial Security for Network Upgrades under LGIP Section 9.3 and reimburse the Interconnection Customer in an amount of (i) fifty percent (50%) of the posted value of the Interconnection Financial Security for Network Upgrades, or, (ii) if the Interconnection Financial Security has been drawn down to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer, the lesser of the remaining balance of the Interconnection Financial Security or the amount calculated under (i) above. If the Interconnection Customer has separately provided capital apart from the Interconnection Financial Security to finance Pre-Construction Activities for Network Upgrades, the applicable Participating TO(s) will credit the capital provided as if drawn from the Interconnection Financial Security and apply (ii) above.

**9.4.2.3 Between Three Hundred Sixty-Six Days and Five Hundred Forty-Five Days After Final Phase II Interconnection Study Report.**

If, at any time between three hundred sixty-six (366) calendar days and five hundred forty-five (545) calendar days after the date of issuance of the final Phase II Interconnection Study report, the Interconnection Customer withdraws the Interconnection Request or terminates the LGIA, as applicable, in accordance with LGIP Section 9.4.1, the applicable Participating TO(s) shall liquidate the Interconnection Financial Security for Network Upgrades under LGIP Section 9.3 and reimburse the Interconnection Customer in an amount of (i) twenty percent (20%) of the posted value of the Interconnection Financial Security for Network Upgrades, or, (ii) if the Interconnection Financial Security has been drawn down to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer, the lesser of remaining balance of the Interconnection Financial Security or the amount calculated under (i) above. If the Interconnection Customer has separately provided capital apart from the Interconnection Financial Security to finance Pre-Construction Activities for Network Upgrades, the applicable Participating TO(s) will credit the capital provided as if drawn from the Interconnection Financial Security and apply (ii) above.

**9.4.2.4 Special Treatment Based on Failure to Obtain Necessary Permit or Authorization from Governmental Authority.**

If, at any time after the posting requirement under LGIP Section 9.3, the Interconnection Customer withdraws the Interconnection Request or terminates the LGIA, as applicable, in accordance with LGIP Section 9.4.1(b), and the Delivery Network Upgrades to be financed by the Interconnection Customer under LGIP Section 7.3 are also to be financed by one or more other Interconnection Customers, then LGIP Section 9.4.2.1 shall apply, except that the Interconnection Customer shall not be reimbursed for its share of any actual costs incurred or irrevocably committed by the applicable Participating TO(s) for Construction Activities.

**9.4.2.5 After Commencement of Construction Activities.**

Except as otherwise provided in LGIP Section 9.4.2.4, once Construction Activities on Network Upgrades on behalf of the Interconnection Customer commence, any withdrawal of the Interconnection Request or termination of the LGIA by the Interconnection Customer will be treated in accordance with this LGIP Section 9.4.

**9.4.2.6 Notification to CAISO and Accounting by Applicable Participating TO(s).**

The applicable Participating TO(s) must notify the CAISO within one (1) Business Day of liquidating any Interconnection Financial Security. Within twenty (20) calendar days of any liquidating event, the applicable Participating TO(s) must provide the CAISO and Interconnection Customer with an accounting of the disposition of the proceeds of the liquidated Interconnection Financial Security and remit to the CAISO all proceeds not otherwise reimbursed to the Interconnection Customer or applied to costs incurred or irrevocably committed by the applicable Participating TO(s) on behalf of the Interconnection Customer in accordance with this LGIP Section 9.4. All non-refundable portions of the Interconnection Financial Security remitted to the CAISO in accordance with this LGIP Section 9.4 shall be treated in accordance with CAISO Tariff Section 37.9.4.

**Section 10 Engineering & Procurement (“E&P”) Agreement.**

Prior to executing an LGIA, an Interconnection Customer may, in order to advance the implementation of its interconnection, request and the applicable Participating TO(s) shall offer the Interconnection Customer, an E&P Agreement that authorizes the applicable Participating TO(s) to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. However, the applicable Participating TO(s) shall not be obligated to offer an E&P Agreement if the Interconnection Customer is in Dispute Resolution as a result of an allegation that the Interconnection Customer has failed to meet any milestones or comply with any prerequisites specified in other parts of the LGIP. The E&P Agreement is an optional procedure. The E&P Agreement shall provide for the Interconnection Customer to pay the cost of all activities authorized by the Interconnection Customer and to make advance payments or provide other satisfactory security for such costs.

The Interconnection Customer shall pay the cost of such authorized activities and any cancellation costs for equipment that is already ordered for its interconnection, which cannot be mitigated as hereafter described, whether or not such items or equipment later become unnecessary. If the Interconnection Customer withdraws its application for interconnection or either Party terminates the E&P Agreement, to the extent the equipment ordered can be canceled under reasonable terms, the Interconnection Customer shall be obligated to pay the associated cancellation costs. To the extent that the equipment cannot be reasonably canceled, the applicable Participating TO(s) may elect: (i) to take title to the equipment, in which event the applicable Participating TO(s) shall refund the Interconnection Customer any amounts paid by Interconnection Customer for such equipment and shall pay the cost of delivery of such equipment, or (ii) to transfer title to and deliver such equipment to the Interconnection Customer, in which event the Interconnection Customer shall pay any unpaid balance and cost of delivery of such equipment.



**Section 11 Large Generator Interconnection Agreement (LGIA).**

**11.1 Tender.**

**11.1.1** Within fifteen (15) Business Days after the CAISO provides the final Phase II Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s) and the CAISO shall tender a draft LGIA, together with draft appendices. The draft LGIA shall be in the form of the FERC-approved form of LGIA set forth in CAISO Tariff Appendix HH. The Interconnection Customer shall provide written comments, or notification of no comments, to the draft appendices to the applicable Participating TO(s) and the CAISO within (30) calendar days of receipt.

**11.1.2** Consistent with LGIP Sections 13.3 and 11.1.1, when the transmission system of a Participating TO, in which the Point of Interconnection is not located, is affected, such Participating TO shall tender a separate agreement, in the form of the LGIA, as appropriately modified.

**11.2 Negotiation.**

Notwithstanding LGIP Section 11.1, at the request of the Interconnection Customer, the applicable Participating TO(s) and CAISO shall begin negotiations with the Interconnection Customer concerning the appendices to the LGIA at any time after the CAISO provides the Interconnection Customer with the final Phase II Interconnection Study report. The applicable Participating TO(s) and CAISO and the Interconnection Customer shall negotiate concerning any disputed provisions of the appendices to the draft LGIA for not more than ninety (90) calendar days after the CAISO provides the Interconnection Customer with the final Phase II Interconnection Study report. If the Interconnection Customer determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the draft LGIA pursuant to LGIP Section 11.1 and request submission of the unexecuted LGIA with FERC or initiate Dispute Resolution procedures pursuant to LGIP Section 13.5. If the Interconnection Customer requests termination of the negotiations, but, within ninety (90) calendar days after issuance of the final Phase II Interconnection Study report, fails to request either the filing of the unexecuted LGIA or initiate Dispute Resolution, it shall be deemed to have withdrawn its Interconnection Request. Unless otherwise agreed by the Parties, if the Interconnection Customer has not executed and returned the LGIA, requested filing of an unexecuted LGIA, or initiated Dispute Resolution procedures pursuant to LGIP Section 13.5 within ninety (90) calendar days after issuance of the final Phase II Interconnection Study report, it shall be deemed to have withdrawn its Interconnection Request. The applicable Participating TO(s) and CAISO shall provide to the Interconnection Customer a final LGIA within fifteen (15) Business Days after the completion of the negotiation process.

**11.3 Execution and Filing.**

The Interconnection Customer shall either: (i) execute the appropriate number of originals of the tendered LGIA as specified in the directions provided by the CAISO and return them to the CAISO, as directed, for completion of the execution process; or (ii) request in writing that the applicable Participating TO(s) and CAISO file with FERC an LGIA in unexecuted form. The LGIA shall be considered executed as of the date that all three Parties have signed the LGIA. As soon as practicable, but not later than ten (10) Business Days after receiving either the executed originals of the tendered LGIA (if it does not conform with a FERC-approved standard form of interconnection agreement) or the request to file an unexecuted LGIA, the applicable Participating TO(s) and CAISO shall file the LGIA with FERC, as necessary, together with an explanation of any matters as to which the Interconnection Customer and the applicable Participating TO(s) or CAISO disagree and support for the costs that the applicable Participating TO(s) propose to charge to the Interconnection Customer under the LGIA. An unexecuted LGIA should contain terms and conditions deemed appropriate by the applicable Participating TO(s) and CAISO for the Interconnection Request. If the Parties agree to proceed with design, procurement, and construction of facilities and upgrades under the agreed-upon terms of the unexecuted LGIA, they may proceed pending FERC action.

**11.4 Commencement of Interconnection Activities.**

If the Interconnection Customer executes the final LGIA, the applicable Participating TO(s), CAISO and the Interconnection Customer shall perform their respective obligations in accordance with the terms of the LGIA, subject to modification by FERC. Upon submission of an unexecuted LGIA, the Interconnection Customer, applicable Participating TO(s) and CAISO may proceed to comply with the unexecuted LGIA, pending FERC action.

**11.5 Interconnection Customer to Meet Requirements of the Participating TO's Interconnection Handbook.**

The Interconnection Customer's Interconnection Facilities shall be designed, constructed, operated and maintained in accordance with the applicable Participating TO's Interconnection Handbook.

**Section 12 Construction of Participating TO's Interconnection Facilities and Network Upgrades, and Funding of Network Upgrades.**

**12.1 Schedule.**

The applicable Participating TO(s) and the Interconnection Customer shall negotiate in good faith concerning a schedule for the construction of the applicable Participating TO's Interconnection Facilities and the Network Upgrades.

## **12.2 Construction Sequencing.**

### **12.2.1 General.**

In general, the sequence of construction of Stand Alone Network Upgrades or other Network Upgrades for a single Interconnection Request, or Network Upgrades identified for the interconnection of Generating Facilities associated with multiple Interconnection Requests, shall be determined, to the maximum extent practical, in a manner that accommodates the proposed Commercial Operation Date set forth in the LGIA of the Interconnection Customer(s) associated with the Stand Alone Network Upgrades or other Network Upgrades.

### **12.2.2 Construction of Network Upgrades that are or were an Obligation of an Entity other than the Interconnection Customer.**

The applicable Participating TO(s) shall be responsible for financing and constructing any Network Upgrades necessary to support the interconnection of the Generating Facility of an Interconnection Customer with an LGIA under this LGIP, whenever either:

- (i) the Network Upgrades were included in the Interconnection Base Case Data for a Phase II Interconnection Study on the basis that they were Network Upgrades associated with Generating Facilities of Interconnection Customers that have an executed LGIA (or its equivalent predecessor agreement) or unexecuted LGIA (or its equivalent predecessor agreement) filed with FERC, but the Network Upgrades will not otherwise be completed because such LGIA or equivalent predecessor agreement was subsequently terminated or the Interconnection Request has otherwise been withdrawn; or
- (ii) the Network Upgrades were included in the Interconnection Base Case Data for a Phase II Interconnection Study on the basis that they were Network Upgrades associated with Generating Facilities of Interconnection Customers that have an executed LGIA (or its equivalent predecessor agreement) or unexecuted LGIA (or its equivalent predecessor agreement) filed with FERC, but the Network Upgrades will not otherwise be completed in time to support the Interconnection Customer's In-Service Date because construction has not commenced in accordance with the terms of such LGIA (or its equivalent predecessor agreement).

The obligation under this LGIP Section 12.2.2 arises only after the CAISO, in coordination with the applicable Participating TO(s), determines that the Network Upgrades remain needed to support the interconnection of the Interconnection Customer's Generating Facility notwithstanding, as applicable, the absence or delay of the Generating Facility that is contractually, or was previously contractually, associated with the Network Upgrades.

Further, to the extent the timing of such Network Upgrades was not accounted for in determining a reasonable Commercial Operation Date among the CAISO, applicable Participating TO(s), and the Interconnection Customer as part of the Phase II Interconnection Study, the applicable Participating TO(s) will use Reasonable Efforts to ensure that the construction of such Network Upgrades can accommodate the Interconnection Customer's proposed Commercial Operation Date. If, despite Reasonable Efforts, it is anticipated that the Network Upgrades cannot be constructed in time to accommodate the Interconnection Customer's proposed Commercial Operation Date, the Interconnection Customer may commit to pay the applicable Participating TO(s) any costs associated with expediting construction of the Network Upgrades to meet the original proposed Commercial Operation Date. The expediting costs under this LGIP Section 12.2.2 shall be in addition to the Interconnection Customer's cost responsibility assigned under LGIP Section 6.3.

### **12.2.3 Advancing Construction of Network Upgrades that are Part of the CAISO's Transmission Plan.**

An Interconnection Customer with an LGIA, in order to maintain its In-Service Date as specified in the LGIA, may request that the CAISO and applicable Participating TO(s) advance to the extent necessary the completion of Network Upgrades that: (i) are necessary to support such In-Service Date and (ii) would otherwise not be completed, pursuant to an approved CAISO Transmission Plan, as defined in Appendix EE, covering the PTO Service Territory of the applicable Participating TO(s), in time to support such In-Service Date. Upon such request, the applicable Participating TO(s) will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay the applicable Participating TO(s) any associated expediting costs. The Interconnection Customer shall be entitled to refunds, if any, in accordance with this LGIP and the LGIA, for any expediting costs paid.

## **12.3 Network Upgrades.**

### **12.3.1 Initial Funding.**

Unless the applicable Participating TO(s) elects to fund the full capital for identified Reliability and Delivery Network Upgrades, they shall be funded by the Interconnection Customer(s) either by means of drawing down the Interconnection Financial Security or by the provision of additional capital, at each Interconnection Customer's election, up to a maximum amount no greater than that established by the cost responsibility assigned to each Interconnection Customer(s) under LGIP Sections 7.3 and 7.4.

Where the applicable Participating TO(s) does not elect to fund the full capital for specific Reliability and Delivery Network Upgrades, the applicable Participating TO(s) shall be responsible for funding any capital costs for the Reliability and Delivery Network Upgrades that exceed the total cost responsibility assigned to the Interconnection Customer(s) under LGIP Sections 7.3 and 7.4.

- (a) Where the funding responsibility for any Reliability Network Upgrade or Delivery Network Upgrade has been assigned to a single Interconnection Customer in accordance with this LGIP, and the applicable Participating TO(s) has elected not to fund the full capital of the Reliability Network Upgrade or Delivery Network Upgrade, the applicable Participating TO(s) shall invoice the Interconnection Customer under LGIA Article 12.1 up to a maximum amount no greater than that established by the cost responsibility assigned to each Interconnection Customer(s) under LGIP Sections 7.3 and 7.4 for the Reliability Network Upgrade or Delivery Network Upgrade, respectively.
- (b) Where the funding responsibility for a Reliability Network Upgrade has been assigned to more than one Interconnection Customer in accordance with this LGIP, and the applicable Participating TO(s) has elected not to fund the full capital of the Reliability Network Upgrade, the applicable Participating TO(s) shall invoice each Interconnection Customer under LGIA Article 12 for such Reliability Network Upgrade based on the ratio of the maximum megawatt electrical output of each new Large Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed the Generating Facility's Interconnection Request to the aggregate maximum megawatt electrical output of all such new Large Generating Facilities and increases in the generating capacity of existing Generating Facilities assigned responsibility for such Reliability Network Upgrade. Each Interconnection Customer may be invoiced up to a maximum amount no greater than that established by the cost responsibility assigned to that Interconnection Customer under LGIP Section 7.3.
- (c) Where the funding responsibility for a Delivery Network Upgrade has been assigned to more than one Interconnection Customer in accordance with this LGIP, and the applicable Participating TO(s) has elected not to fund the full capital of the Delivery Network Upgrade, the applicable Participating TO(s) shall invoice each Interconnection Customer under LGIA Article 12 for such Delivery Network Upgrade based on the percentage flow impact of each assigned Large Generating Facility on each Delivery Network Upgrade as determined by the Generation distribution factor methodology used in the On-Peak and Off-Peak Deliverability Assessments performed in the Phase II Interconnection Study. Each Interconnection Customer may be invoiced up to a maximum amount no greater than that established by the cost responsibility assigned to that Interconnection Customer under LGIP Section 7.4.

Any permissible extension of the Commercial Operation Date of a Large Generating Facility will not alter the Interconnection Customer's obligation to finance Network Upgrades where the Network Upgrades are required to meet the earlier Commercial Operation Date(s) of other Large Generating Facilities that have also been assigned cost responsibility for the Network Upgrades.

**12.3.2 Repayment of Amounts Advanced for Network Upgrades and Refund of Interconnection Financial Security.**

Upon the Commercial Operation Date of the Large Generating Facility, which shall be the Commercial Operation Date of the entire Large Generating Facility, if phased, the Interconnection Customer shall be entitled to a repayment for the Interconnection Customer's contribution to the cost of Network Upgrades in accordance with its cost responsibility assigned under LGIP Sections 7.3 and 7.4. Such amount shall be paid to the Interconnection Customer by the applicable Participating TO(s) on a dollar-for-dollar basis either through (1) direct payments made on a levelized basis over the five-year period commencing on the Large Generating Facility's Commercial Operation Date; or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years of the Commercial Operation Date. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment. The Interconnection Customer may assign such repayment rights to any person.

Instead of direct payments, the Interconnection Customer may elect to receive Firm Transmission Rights (FTRs) in accordance with the CAISO Tariff associated with the Network Upgrades, or portions thereof, that were funded by the Interconnection Customer, to the extent such FTRs or alternative rights are available under the CAISO Tariff at the time of the election. Such FTRs would take effect upon the Commercial Operation Date of the Large Generating Facility, which shall be the Commercial Operation Date of the entire Large Generating Facility, if phased, in accordance with the LGIA.

**12.4 Special Provisions for Affected Systems and Other Affected Participating TOs.**

The Interconnection Customer shall enter into an agreement with the owner of the Affected System and/or other affected Participating TO(s), as applicable. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to the owner of the Affected System and/or other affected Participating TO(s) as well as the repayment by the owner of the Affected System and/or other affected Participating TO(s). If the affected entity is another Participating TO, the initial form of agreement will be the LGIA, as appropriately modified.

Any repayment by the owner of the Affected System shall be in accordance with FERC Order No. 2003-B (109 FERC ¶ 61,287).

**Section 13 Miscellaneous.**

**13.1 Confidentiality.**

Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Parties receiving the information that the information is confidential.

If requested by any Party, the other Parties shall provide in writing, the basis for asserting that the information referred to in this Section warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

The confidentiality provisions of this LGIP are limited to information provided pursuant to this LGIP.

#### **13.1.1 Scope.**

Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or breach of the LGIA; or (6) is required, in accordance with LGIP Section 13.1.6, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the LGIP. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

#### **13.1.2 Release of Confidential Information.**

No Party shall release or disclose Confidential Information to any other person, except to its employees, consultants, Affiliates (limited by FERC's Standards of Conduct requirements set forth in Part 358 of FERC's Regulations, 18 C.F.R. 358), or to parties who may be or considering providing financing to or equity participation with the Interconnection Customer, or to potential purchasers or assignees of the Interconnection Customer, on a need-to-know basis in connection with these procedures, unless such person has first been advised of the confidentiality provisions of this LGIP Section 13.1 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this LGIP Section 13.1.

**13.1.3 Rights.**

Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Parties. The disclosure by each Party to the other Parties of Confidential Information shall not be deemed a waiver by a Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

**13.1.4 No Warranties.**

By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to the other Parties nor to enter into any further agreements or proceed with any other relationship or joint venture.

**13.1.5 Standard of Care.**

Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under these procedures or its regulatory requirements.

**13.1.6 Order of Disclosure.**

If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Parties with prompt notice of such request(s) or requirement(s) so that the other Parties may seek an appropriate protective order or waive compliance with the terms of the LGIP. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

**13.1.7 Remedies.**

Monetary damages are inadequate to compensate a Party for another Party's breach of its obligations under this LGIP Section 13.1. Each Party accordingly agrees that the other Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party breaches or threatens to breach its obligations under this LGIP Section 13.1, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the breach of this LGIP Section 13.1, but shall be in addition to all other remedies available at law or in equity.



Further, the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this LGIP Section 13.1.

**13.1.8 Disclosure to FERC, its Staff, or a State.**

Notwithstanding anything in this LGIP Section 13.1 to the contrary, and pursuant to 18 C.F.R. section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to the LGIP, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. section 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other applicable Parties when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner, consistent with applicable state rules and regulations.

**13.1.9** Subject to the exception in LGIP Section 13.1.8, any Confidential Information shall not be disclosed by the other Parties to any person not employed or retained by the other Parties, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Parties, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this LGIP or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a subregional, regional or national reliability organization or planning group. The Party asserting confidentiality shall notify the other Parties in writing of the information it claims is confidential. Prior to any disclosures of another Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

**13.1.10** This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a breach of this provision).

**13.1.11** The Participating TO or CAISO shall, at the Interconnection Customer's election, destroy, in a confidential manner, or return the Confidential Information provided at the time of Confidential Information is no longer needed.

**13.2 Delegation of Responsibility.**

The CAISO and the Participating TOs may use the services of subcontractors as deemed appropriate to perform their obligations under this LGIP. The applicable Participating TO or CAISO shall remain primarily liable to the Interconnection Customer for the performance of its respective subcontractors and compliance with its obligations of this LGIP. The subcontractor shall keep all information provided confidential and shall use such information solely for the performance of such obligation for which it was provided and no other purpose.

**13.3 [NOT USED]**

**13.4 [NOT USED]**

**13.5 Disputes.**

If an Interconnection Customer disputes withdrawal of its Interconnection Request under LGIP Section 3.8, the CAISO will forward any information regarding the disputed withdrawal received under LGIP Section 3.8 within one (1) Business Day to the LGIP Executive Dispute Committee, consisting of the Vice President responsible for administration of this LGIP, the CAISO Vice President responsible for customer affairs, and an additional Vice President. The LGIP Executive Dispute Committee shall have five (5) Business Days to determine whether or not to restore the Interconnection Request. If the LGIP Executive Dispute Committee concludes that the Interconnection Request should have been withdrawn, the Interconnection Customer may seek relief in accordance with the CAISO ADR Procedures.

All disputes, other than those arising from LGIP Section 3.8, arising out of or in connection with this LGIP whereby relief is sought by or from the CAISO shall be settled in accordance with the CAISO ADR Procedures.

Disputes arising out of or in connection with this LGIP not subject to the CAISO ADR Procedures shall be resolved as follows:

**13.5.1 Submission.**

In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with the LGIA, the LGIP, or their performance, such Party (the "disputing Party") shall provide the other Party with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) calendar days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of the LGIA and LGIP.

**13.5.2 External Arbitration Procedures.**

Any arbitration initiated under these procedures shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) calendar days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) calendar days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules") and any applicable FERC regulations or RTO rules; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this LGIP Section 13.5, the terms of this LGIP Section 13.5 shall prevail.

**13.5.3 Arbitration Decisions.**

Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) calendar days of appointment and shall notify the Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of the LGIA and LGIP and shall have no power to modify or change any provision of the LGIA and LGIP in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

**13.5.4 Costs.**

Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

### **13.6 Local Furnishing Bonds.**

#### **13.6.1 Participating TOs That Own Facilities Financed by Local Furnishing Bonds.**

This provision is applicable only to a Participating TO that has financed facilities for the local furnishing of electric energy with Local Furnishing Bonds. Notwithstanding any other provisions of this LGIP, the Participating TO and the CAISO shall not be required to provide Interconnection Service to the Interconnection Customer pursuant to this LGIP and the LGIA if the provision of such Interconnection Service would jeopardize the tax-exempt status of any Local Furnishing Bond(s) issued for the benefit of the Participating TO.

#### **13.6.2 Alternative Procedures for Requesting Interconnection Service.**

If a Participating TO determines that the provision of Interconnection Service requested by the Interconnection Customer would jeopardize the tax-exempt status of any Local Furnishing Bond(s) issued for the benefit of the Participating TO, it shall advise the Interconnection Customer and the CAISO within (30) calendar days of receipt of the Interconnection Request.

The Interconnection Customer thereafter may renew its request for the same interconnection Service by tendering an application under Section 211 of the Federal Power Act, in which case the Participating TO, within ten (10) calendar days of receiving a copy of the Section 211 application, will waive its rights to a request for service under Section 213(a) of the Federal Power Act and to the issuance of a proposed order under Section 212(c) of the Federal Power Act, and the CAISO and Participating TO shall provide the requested Interconnection Service pursuant to the terms and conditions set forth in this LGIP and the LGIA.

### **13.7 Change in CAISO Operational Control.**

If the CAISO no longer has control of the portion of the CAISO Controlled Grid at the Point of Interconnection during the period when an Interconnection Request is pending, the CAISO shall transfer to the applicable former Participating TO or successor entity which has ownership of the Point of Interconnection any amount of the deposit or payment with interest thereon that exceeds the cost that it incurred to evaluate the request for interconnection. Any difference between such net deposit amount and the costs that the former Participating TO or successor entity incurs to evaluate the request for interconnection shall be paid by or refunded to the Interconnection Customer, as appropriate. The CAISO shall coordinate with the applicable former Participating TO or successor entity which has ownership of the Point of Interconnection to complete any Interconnection Study, as appropriate, that the CAISO has begun but has not completed. If the CAISO has tendered a draft LGIA to the Interconnection Customer but the Interconnection Customer has neither executed the LGIA nor requested the filing of an unexecuted LGIA with FERC, unless otherwise provided, the Interconnection Customer must complete negotiations with the applicable former Participating TO or successor entity which has the ownership of the Point of Interconnection.

**APPENDIX 1 to LGIP  
INTERCONNECTION REQUEST**

Provide three copies of this completed form pursuant to Section 7 of this LGIP Appendix 1 below.

1. The undersigned Interconnection Customer submits this request to interconnect its Large Generating Facility with the CAISO Controlled Grid pursuant to the CAISO Tariff.
2. This Interconnection Request is for (check one):  
 A proposed new Large Generating Facility.  
 An increase in the generating capacity or a Material Modification to an existing Generating Facility.
3. Requested Deliverability Status is for (check one):  
 Full Capacity  
 Energy Only
4. The Interconnection Customer provides the following information:
  - a. Address or location, including the county, of the proposed new Large Generating Facility site or, in the case of an existing Generating Facility, the name and specific location, including the county, of the existing Generating Facility;  
  
Project Name:  
  
Project Location:  
Street Address:  
City, State:  
County:  
Zip Code:
  - b. Maximum megawatt electrical output of the proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity of an existing Generating Facility;  
  
Maximum megawatt electrical output (Net MW):                      or  
Megawatt increase (Net MW):

- c. Type of project (i.e., gas turbine, hydro, wind, etc.) and general description of the equipment configuration;

- |   |   |
|---|---|
| <input type="checkbox"/> Cogeneration   | <input type="checkbox"/> Reciprocating Engine |
| <input type="checkbox"/> Biomass        | <input type="checkbox"/> Steam Turbine        |
| <input type="checkbox"/> Gas Turbine    | <input type="checkbox"/> Wind                 |
| <input type="checkbox"/> Hydro          | <input type="checkbox"/> Photovoltaic         |
| <input type="checkbox"/> Combined Cycle |   |

Other (please describe):

General description of the equipment configuration:

- d. Proposed In-Service Date, Trial Operation date and Commercial Operation Date by day, month, and year and term of service (dates must be sequential);

Proposed In-Service Date:                                    /                    /

Proposed Trial Operation date:                                /                    /

Proposed Commercial Operation Date:                        /                    /

Proposed Term of Service (years):

- e. Name, address, telephone number, and e-mail address of the Interconnection Customer's contact person;

Name:

Title:

Company Name:

Street Address:

City, State:

Zip Code:

Phone Number:

Fax Number:

Email Address:

Interconnection

Customer's

DUNS Number

- f. Approximate location of the proposed Point of Interconnection (i.e., specify interconnection point, voltage level, and the location of interconnection); and
- g. Interconnection Customer data (set forth in Attachment A)

***The Interconnection Customer shall provide to the CAISO the technical data called for in LGIP Appendix 1, Attachment A. Three (3) copies are required.***

5. Applicable deposit amount as specified in the LGIP made payable to California ISO. Send check to CAISO along with the:
1. Appendix 1 to LGIP (Interconnection Request) for processing.
  2. Attachment A to Appendix 1 (Interconnection Request Large Generating Facility Data).

6. Evidence of Site Exclusivity as specified in the LGIP and name(s), address(es) and contact information of site owner(s) (check one):

Is attached to this Interconnection Request  
 Deposit in lieu of Site Exclusivity attached, Site Exclusivity will be provided at a later date in accordance with this LGIP

7. This Interconnection Request shall be submitted to the representative indicated below:

New Resource Interconnection  
California ISO  
P.O. Box 639014  
Folsom, CA 95763-9014

Overnight address: 151 Blue Ravine Road, Folsom, CA 95630

8. Representative of the Interconnection Customer to contact:

[To be completed by the Interconnection Customer]

Name:

Title:

Company Name:

Street Address:

City, State:

Zip Code:

Phone Number:

Fax Number:

Email Address:

9. This Interconnection Request is submitted by:

Legal name of the Interconnection Customer:

By (signature):

Name (type or print):

Title:

Date:

**Attachment A  
To LGIP Appendix 1  
Interconnection Request**

**LARGE GENERATING FACILITY DATA**

Provide three copies of this completed form pursuant to Section 7 of LGIP Appendix 1.

- 1. Provide two original prints and one reproducible copy (no larger than 36" x 24") of the following:**
  - A. Site drawing to scale, showing generator location and Point of Interconnection with the CAISO Controlled Grid.
  - B. Single-line diagram showing applicable equipment such as generating units, step-up transformers, auxiliary transformers, switches/disconnects of the proposed interconnection, including the required protection devices and circuit breakers. For wind generator farms, the one line diagram should include the distribution lines connecting the various groups of generating units, the generator capacitor banks, the step up transformers, the distribution lines, and the substation transformers and capacitor banks at the Point of Interconnection with the CAISO Controlled Grid.
  
- 2. Generating Facility Information**
  - A. Total Generating Facility rated output (kW): \_\_\_\_\_
  - B. Generating Facility auxiliary Load (kW): \_\_\_\_\_
  - C. Project net capacity (kW): \_\_\_\_\_
  - D. Standby Load when Generating Facility is off-line (kW): \_\_\_\_\_
  - E. Number of Generating Units: \_\_\_\_\_  
(Please repeat the following items for each generator)
  - F. Individual generator rated output (kW for each unit): \_\_\_\_\_
  - G. Manufacturer: \_\_\_\_\_
  - H. Year Manufactured: \_\_\_\_\_
  - I. Nominal Terminal Voltage: \_\_\_\_\_
  - J. Rated Power Factor (%): \_\_\_\_\_
  - K. Type (Induction, Synchronous, D.C. with Inverter): \_\_\_\_\_
  - L. Phase (3 phase or single phase): \_\_\_\_\_
  - M. Connection (Delta, Grounded WYE, Ungrounded WYE, impedance grounded): \_\_\_\_\_
  - N. Generator Voltage Regulation Range: \_\_\_\_\_
  - O. Generator Power Factor Regulation Range: \_\_\_\_\_
  - P. For combined cycle plants, specify the plant output for an outage of the steam turbine or an outage of a single combustion turbine: \_\_\_\_\_



**3. Synchronous Generator – General Information:**

(Please repeat the following for each generator)

- A. Rated Generator speed (rpm): \_\_\_\_\_
- B. Rated MVA: \_\_\_\_\_
- C. Rated Generator Power Factor: \_\_\_\_\_
- D. Generator Efficiency at Rated Load (%): \_\_\_\_\_
- E. Moment of Inertia (including prime mover): \_\_\_\_\_
- F. Inertia Time Constant (on machine base) H: \_\_\_\_\_ sec or MJ/MVA
- G. SCR (Short-Circuit Ratio - the ratio of the field current required for rated open-circuit voltage to the field current required for rated short-circuit current): \_\_\_\_\_
- H. Please attach generator reactive capability curves.
- I. Rated Hydrogen Cooling Pressure in psig (Steam Units only): \_\_\_\_\_
- J. Please attach a plot of generator terminal voltage versus field current that shows the air gap line, the open-circuit saturation curve, and the saturation curve at full load and rated power factor.

**4. Excitation System Information**

(Please repeat the following for each generator)

- A. Indicate the Manufacturer \_\_\_\_\_ and Type \_\_\_\_\_ of excitation system used for the generator. For exciter type, please choose from 1 to 8 below or describe the specific excitation system.
  - (1) Rotating DC commutator exciter with continuously acting regulator. The regulator power source is independent of the generator terminal voltage and current.
  - (2) Rotating DC commutator exciter with continuously acting regulator. The regulator power source is bus fed from the generator terminal voltage.
  - (3) Rotating DC commutator exciter with non-continuously acting regulator (i.e., regulator adjustments are made in discrete increments).
  - (4) Rotating AC Alternator Exciter with non-controlled (diode) rectifiers. The regulator power source is independent of the generator terminal voltage and current (not bus-fed).
  - (5) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers. The regulator power source is fed from the exciter output voltage.
  - (6) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers.
  - (7) Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from the generator terminal voltage.
  - (8) Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from a combination of generator terminal voltage and current (compound-source controlled rectifiers system).
- B. Attach a copy of the block diagram of the excitation system from its instruction manual. The diagram should show the input, output, and all feedback loops of the excitation system.
- C. Excitation system response ratio (ASA): \_\_\_\_\_
- D. Full load rated exciter output voltage: \_\_\_\_\_
- E. Maximum exciter output voltage (ceiling voltage): \_\_\_\_\_
- F. Other comments regarding the excitation system?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**5. Power System Stabilizer Information.**

(Please repeat the following for each generator. All new generators are required to install PSS unless an exemption has been obtained from WECC. Such an exemption can be obtained for units that do not have suitable excitation systems.)

- A. Manufacturer: \_\_\_\_\_
- B. Is the PSS digital or analog? \_\_\_\_\_
- C. Note the input signal source for the PSS?  
\_\_\_\_\_ Bus frequency \_\_\_\_\_ Shaft speed \_\_\_\_\_ Bus Voltage  
\_\_\_\_\_ Other (specify source)
- D. Please attach a copy of a block diagram of the PSS from the PSS Instruction Manual and the correspondence between dial settings and the time constants or PSS gain.
- E. Other comments regarding the PSS?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**6. Turbine-Governor Information**

(Please repeat the following for each generator)

Please complete Part A for steam, gas or combined-cycle turbines, Part B for hydro turbines, and Part C for both.

- A. Steam, gas or combined-cycle turbines:
  - (1) List type of unit (Steam, Gas, or Combined-cycle): \_\_\_\_\_
  - (2) If steam or combined-cycle, does the turbine system have a reheat process (i.e., both high and low pressure turbines)? \_\_\_\_\_
  - (3) If steam with reheat process, or if combined-cycle, indicate in the space provided, the percent of full load power produced by each turbine:  
Low pressure turbine or gas turbine: \_\_\_\_\_%  
High pressure turbine or steam turbine: \_\_\_\_\_%
- B. Hydro turbines:
  - (1) Turbine efficiency at rated load: \_\_\_\_\_%
  - (2) Length of penstock: \_\_\_\_\_ft
  - (3) Average cross-sectional area of the penstock: \_\_\_\_\_ft<sup>2</sup>
  - (4) Typical maximum head (vertical distance from the bottom of the penstock, at the gate, to the water level): \_\_\_\_\_ft
  - (5) Is the water supply run-of-the-river or reservoir: \_\_\_\_\_
  - (6) Water flow rate at the typical maximum head: \_\_\_\_\_ft<sup>3</sup>/sec
  - (7) Average energy rate: \_\_\_\_\_kW-hrs/acre-ft
  - (8) Estimated yearly energy production: \_\_\_\_\_kW-hrs

C. Complete this section for each machine, independent of the turbine type.

- (1) Turbine manufacturer: \_\_\_\_\_
- (2) Maximum turbine power output: \_\_\_\_\_ MW
- (3) Minimum turbine power output (while on line): \_\_\_\_\_ MW
- (4) Governor information:
  - (a) Droop setting (speed regulation): \_\_\_\_\_
  - (b) Is the governor mechanical-hydraulic or electro-hydraulic (Electro-hydraulic governors have an electronic speed sensor and transducer.)?  
\_\_\_\_\_
  - (c) Other comments regarding the turbine governor system?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**7. Synchronous Generator and Associated Equipment – Dynamic Models:**

For each generator, governor, exciter and power system stabilizer, select the appropriate dynamic model from the General Electric PSLF Program Manual and provide the required input data. The manual is available on the GE website at [www.gepower.com](http://www.gepower.com). Select the following links within the website: 1) Our Businesses, 2) GE Power Systems, 3) Energy Consulting, 4) GE PSLF Software, 5) GE PSLF User's Manual.

There are links within the GE PSLF User's Manual to detailed descriptions of specific models, a definition of each parameter, a list of the output channels, explanatory notes, and a control system block diagram. The block diagrams are also available on the CAISO Website.

If you require assistance in developing the models, we suggest you contact General Electric. Accurate models are important to obtain accurate study results. Costs associated with any changes in facility requirements that are due to differences between model data provided by the generation developer and the actual generator test data, may be the responsibility of the generation developer.

**8. Induction Generator Data:**

- A. Rated Generator Power Factor at rated load: \_\_\_\_\_
- B. Moment of Inertia (including prime mover): \_\_\_\_\_
- C. Do you wish reclose blocking? Yes \_\_\_\_, No \_\_\_\_  
Note: Sufficient capacitance may be on the line now, or in the future, and the generator may self-excite unexpectedly.

**9. Generator Short Circuit Data**

For each generator, provide the following reactances expressed in p.u. on the generator base:

- $X''^1$  – positive sequence subtransient reactance: \_\_\_\_\_
- $X''^2$  – negative sequence subtransient reactance: \_\_\_\_\_
- $X''^0$  – zero sequence subtransient reactance: \_\_\_\_\_

Generator Grounding:

- A. \_\_\_\_\_ Solidly grounded
- B. \_\_\_\_\_ Grounded through an impedance  
Impedance value in p.u. on generator base. R: \_\_\_\_\_ p.u.  
X: \_\_\_\_\_ p.u.
- C. \_\_\_\_\_ Ungrounded

**10. Step-Up Transformer Data**

For each step-up transformer, fill out the data form provided in Table 1.

**11. Line Data**

There is no need to provide data for new lines that are to be planned by the Participating TO. However, for transmission lines that are to be planned by the generation developer, please provide the following information:

Nominal Voltage: \_\_\_\_\_  
Line Length (miles): \_\_\_\_\_  
Line termination Points: \_\_\_\_\_  
Conductor Type: \_\_\_\_\_ Size: \_\_\_\_\_  
If bundled. Number per phase: \_\_\_\_\_, Bundle spacing: \_\_\_\_\_ in.  
Phase Configuration. Vertical: \_\_\_\_\_, Horizontal: \_\_\_\_\_  
Phase Spacing (ft): A-B: \_\_\_\_\_, B-C: \_\_\_\_\_, C-A: \_\_\_\_\_  
Distance of lowest conductor to Ground: \_\_\_\_\_ ft  
Ground Wire Type: \_\_\_\_\_ Size: \_\_\_\_\_ Distance to Ground: \_\_\_\_\_ ft  
Attach Tower Configuration Diagram  
Summer line ratings in amperes (normal and emergency) \_\_\_\_\_  
Resistance ( R ): \_\_\_\_\_ p.u.\*\*  
Reactance: ( X ): \_\_\_\_\_ p.u.\*\*  
Line Charging (B/2): \_\_\_\_\_ p.u.\*\*  
\*\* On 100-MVA and nominal line voltage (kV) Base

**12. Wind Generators**

Number of generators to be interconnected pursuant to this Interconnection Request: \_\_\_\_\_

Elevation: \_\_\_\_\_ Single Phase \_\_\_\_\_ Three Phase

Inverter manufacturer, model name, number, and version:  
\_\_\_\_\_

List of adjustable setpoints for the protective equipment or software:  
\_\_\_\_\_

Field Volts: \_\_\_\_\_

Field Amperes: \_\_\_\_\_

Motoring Power (kW): \_\_\_\_\_

Neutral Grounding Resistor (If Applicable): \_\_\_\_\_

$I_2^2t$  or K (Heating Time Constant): \_\_\_\_\_

Rotor Resistance: \_\_\_\_\_

Stator Resistance: \_\_\_\_\_

Stator Reactance: \_\_\_\_\_

Rotor Reactance: \_\_\_\_\_

Magnetizing Reactance: \_\_\_\_\_

Short Circuit Reactance: \_\_\_\_\_

Exciting Current: \_\_\_\_\_

Temperature Rise: \_\_\_\_\_

Frame Size: \_\_\_\_\_

Design Letter: \_\_\_\_\_

Reactive Power Required In Vars (No Load): \_\_\_\_\_

Reactive Power Required In Vars (Full Load): \_\_\_\_\_

Total Rotating Inertia, H: \_\_\_\_\_ Per Unit on KVA Base

Note: A completed General Electric Company Power Systems Load Flow (PSLF) data sheet must be supplied with the Interconnection Request. If other data sheets are more appropriate to the proposed device then they shall be provided and discussed at Scoping Meeting.

TABLE 1  
 TRANSFORMER DATA

UNIT \_\_\_\_\_

NUMBER OF TRANSFORMERS \_\_\_\_\_ PHASE \_\_\_\_\_

| RATED KVA   | H Winding | X Winding | Y Winding |
|---|-----------|-----------|-----------|
| Connection<br>(Delta, Wye, Gnd.)                                | _____     | _____     | _____     |
| 55 C Rise   | _____     | _____     | _____     |
| 65 C Rise   | _____     | _____     | _____     |
| RATED VOLTAGE   | _____     | _____     | _____     |
| BIL   | _____     | _____     | _____     |
| AVAILABLE TAPS<br>(planned or existing)                         | _____     | _____     | _____     |
| LOAD TAP CHANGER?   | _____     | _____     | _____     |
| TAP SETTINGS  | _____     | _____     | _____     |
| COOLING TYPE : OA _____ OA/FA _____ OA/FA/FA _____ OA/FOA _____ |           |           |           |
| IMPEDANCE   | H-X       | H-Y       | X-Y       |
| Percent   | _____     | _____     | _____     |
| MVA Base  | _____     | _____     | _____     |
| Tested Taps   | _____     | _____     | _____     |
| WINDING RESISTANCE  | H         | X         | Y         |
| Ohms  | _____     | _____     | _____     |

CURRENT TRANSFORMER RATIOS

H \_\_\_\_\_ X \_\_\_\_\_ Y \_\_\_\_\_ N \_\_\_\_\_

PERCENT EXCITING CURRENT 100 % Voltage; \_\_\_\_\_ 110% Voltage \_\_\_\_\_

Supply copy of nameplate and manufacture's test report when available

**Appendix 2 to**

**Large Generator Interconnection Procedures (LGIP)  
Relating to the Transition Cluster**

**Section 1. Objective, Applicability and Definitions.**

**1.1 Objective and Applicability.**

The objective of this Appendix 2 to the Large Generator Interconnection Procedures (LGIP) is to implement the requirements for interconnecting to the CAISO Controlled Grid those Generating Facilities assigned to the Transition Cluster. All Interconnection Requests assigned to the Transition Cluster shall be deemed to have been assigned to a Queue Cluster Window for purposes of LGIP Section 1.1 and therefore all provisions of the LGIP apply to Generating Facilities included in the Transition Cluster, except as set forth herein.

**1.2 Definitions.**

**1.2.1 Master Definitions Supplement and Other General Definition Rules.**

Unless the context otherwise requires, any word or expression defined in the Master Definitions Supplement, Appendix A to the CAISO Tariff, shall have the same meaning where used in this Appendix 2 to the LGIP. Further, unless the context otherwise requires, any word or expression defined in LGIP Section 1.2 shall have the same meaning where used in this Appendix 2 to the LGIP. References to LGIP in this Appendix 2 are to Appendix GG of the CAISO Tariff.

**1.2.2 Special Definitions for this LGIP Appendix 2.**

In this Appendix 2 to the LGIP, the following words and expressions shall have the meanings set opposite them:

**“Serial Study Group”** shall mean the collection of valid Interconnection Requests with an assigned Queue Position on or before June 1, 2008 studied in accordance with the interconnection procedures set forth in the version of the LGIP set forth in CAISO Tariff Appendix U as permitted by the decision of FERC in Docket No. ER08-960-000.

**“Transition Cluster”** shall mean the collection of valid Interconnection Requests with an assigned Queue Position on or before June 1, 2008 that were not included as part of the Serial Study Group by the decision of FERC in Docket No. ER08-960-000.

**“Transition Cluster Interconnection Study Deposit”** shall mean, for each Interconnection Request in the Transition Cluster other than those subject to Section 3.2 of this Appendix 2 to the LGIP, the difference between (i) \$250,000 and (ii) the total amount the Interconnection Customer has been charged for Interconnection Studies performed under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement plus the balance of any remaining deposit provided under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement. For an Interconnection Request subject to Section 3.2 of this Appendix 2 to the LGIP, the amount of the Transition Cluster Interconnection Study Deposit shall be the difference between (i) \$100,000 and (ii) the total amount the Interconnection Customer has been charged for Interconnection Studies performed under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement plus the balance of any remaining deposit provided under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement.

**2. Queue Position.**

The Queue Position of any Interconnection Request included in the Transition Cluster shall be deemed to be lower than that of any Interconnection Request included in the Serial Study Group for purposes of performing Interconnection Studies for Large Generating Facilities whose Interconnection Requests are in the Serial Study Group.

**3. Requirements to Remain in the Transition Cluster.**

**3.1 General Requirements for Large Generating Facilities.**

An Interconnection Request deemed to be included in the Transition Cluster in accordance with the decision of FERC in Docket No. ER08-960-000 will be deemed to have been withdrawn from the Transition Cluster unless the Interconnection Customer provides, within sixty (60) calendar days from the effective date of this Appendix 2 to the LGIP, all of the following: (i) a Transition Cluster Interconnection Study Deposit, (ii) a statement of the requested deliverability status, (iii) a preferred Point of Interconnection and voltage level and all other technical data required by the LGIP, if not already submitted to the CAISO, and (iv) demonstration of Site Exclusivity or a posting of a Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity must be, at a minimum, through the anticipated Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility.

Section 3.8 of the LGIP shall not apply to a failure to satisfy the requirements of this Section 3.1 of this Appendix 2 to the LGIP.



**3.2 Special Requirements for Certain Small and Existing Large Generating Facilities.**

An Interconnection Customer with an Interconnection Request in the Transition Cluster relating to (a) a Small Generating Facility seeking a Deliverability Assessment or (b) a Generating Facility, subject to the LGIP in accordance with CAISO Tariff Section 25.1.1, that has achieved Commercial Operation prior to the date of the Interconnection Request, and is seeking to increase the capacity of the Generating Facility by less than 20 MW, will be deemed to have withdrawn its Interconnection Request from the Transition Cluster unless it provides, within sixty (60) calendar days from the effective date of this Appendix 2 to the LGIP, all of the following: (i) a Transition Cluster Interconnection Study Deposit, (ii) a statement of the requested deliverability status, (iii) a preferred Point of Interconnection and voltage level and all other technical data required by the LGIP, if not already submitted to the CAISO, and (iv) demonstration of Site Exclusivity or a posting of a Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity, at a minimum, must be through the Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility.

Section 3.8 of the LGIP shall not apply to a failure to satisfy the requirements of this Section 3.2 of this Appendix 2 to the LGIP.

**3.3 Communication of Transition Cluster Interconnection Study Deposit Amount.**

The CAISO shall provide each Interconnection Customer with the amount of its Transition Cluster Interconnection Study Deposit within five (5) Business Days after the effective date of this Appendix 2 to the LGIP.

**3.4 Use of the Transition Cluster Interconnection Study Deposit.**

The CAISO shall deposit all Transition Cluster Interconnection Study Deposits in an interest bearing account at a bank or financial institution designated by the CAISO. The Transition Cluster Interconnection Study Deposit shall be applied to pay for prudent costs incurred by the CAISO, the Participating TOs, or third parties at the direction of the CAISO or Participating TOs, as applicable, to perform and administer the Interconnection Studies. The Transition Cluster Interconnection Study Deposit is not refundable.

Upon execution of an LGIA by an Interconnection Customer, the CAISO and the applicable Participating TO(s), or the approval by FERC of an unexecuted LGIA, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Transition Cluster Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceed the costs the CAISO, Participating TOs, or third parties have incurred on the Interconnection Customer's behalf.

Notwithstanding the foregoing, an Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request during an Interconnection Study Cycle shall be obligated to pay to the CAISO all costs in excess of the Transition Cluster Interconnection Study Deposit that have been prudently incurred or irrevocably have been committed to be incurred with respect to that Interconnection Request prior to withdrawal. The CAISO will reimburse the applicable Participating TO(s) or third parties, as applicable, for all work performed associated with the Interconnection Request at the CAISO's direction. The Interconnection Customer must pay all monies due before it is allowed to obtain any Interconnection Study data or results.

All non-refundable portions of the Transition Cluster Interconnection Study Deposit that exceed the costs the CAISO, Participating TOs, or third parties have incurred on the Interconnection Customer's behalf shall be treated in accordance with CAISO Tariff Section 37.9.4.

### **3.5 Obligation for Study Costs.**

The CAISO shall charge and the Interconnection Customer shall pay the actual costs of the Interconnection Studies. The CAISO shall issue invoices for Interconnection Studies that shall include a detailed and itemized accounting of the cost of each Interconnection Study. The CAISO shall draw from the Transition Cluster Interconnection Study Deposit any undisputed costs within thirty (30) calendar days after issuance of an invoice therefor. Whenever the actual cost of performing the Interconnection Studies exceeds the Transition Cluster Interconnection Study Deposit, the Interconnection Customer shall pay the undisputed difference in accordance with the CAISO issued invoice within thirty (30) calendar days. The CAISO shall not be obligated to continue to have any studies conducted unless the Interconnection Customer has paid all undisputed amounts in compliance herewith. In the event an Interconnection Study is performed by the CAISO, the Interconnection Customer shall pay only the costs of those activities performed by the Participating TO to adequately review or validate that Interconnection Study.

## **4. Phase I Interconnection Study.**

### **4.1 Grouping Interconnection Requests and Base Cases.**

Interconnection Requests in the Transition Cluster shall be grouped in accordance with LGIP Section 6.1. Rather than Generation submitted during a Queue Cluster Window, the Interconnection Base Case Data for the Transition Cluster shall reflect the Generation from those Interconnection Requests that satisfy the requirements of Sections 3.1 and 3.2 of this Appendix 2 to the LGIP.

**4.2 Schedule.**

The Phase I Interconnection Study, as described in LGIP Section 6, including the grouping and Interconnection Base Case Data development, for the Transition Cluster shall commence no later than December 1, 2008 or sixty (60) calendar days after the effective date of this Appendix 2 to the LGIP, whichever is later. Results of the Phase I Interconnection Study shall be provided to the Interconnection Customer within two hundred forty (240) calendar days after commencement under this Section.

**4.3 Results Meeting**

Within sixty (60) calendar days after providing the Phase I Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s), the CAISO and the Interconnection Customer shall meet to discuss the results of the Phase I Interconnection Study, including assigned cost responsibility.

**5. Phase II Interconnection Study.**

**5.1 Phase II Interconnection Study Procedures.**

The Phase II Interconnection Study, as described in LGIP Section 7, for the Transition Cluster shall commence no later than one hundred twenty (120) calendar days after publication of the Phase I Interconnection Study report. Results of the Phase II Interconnection Study shall be provided to the Interconnection Customer within three hundred thirty (330) calendar days after commencement under this Section.

**5.2 Coordination of the Phase II Interconnection Study with the Transmission Planning Process.**

As part of the Uniform Planning Assumptions and Study Plan developed under Section 24 in Appendix EE of the CAISO Tariff during calendar year 2009, the CAISO shall include technical analyses intended to identify, at a minimum, conceptual transmission upgrades that may access proposed Large Generating Facilities included in the Transition Cluster that are located in Energy Resource Areas.

**6. Interconnection Financial Security.**

The provisions of LGIP Section 9 shall apply to the Transition Cluster, except that the initial posting of Interconnection Financial Security under LGIP Section 9.2 in Appendix GG shall be required on or before one hundred twenty (120) calendar days after publication of the Phase I Interconnection Study report.

**Appendix 3 to LGIP**

**LARGE GENERATOR INTERCONNECTION STUDY PROCESS AGREEMENT**

**THIS AGREEMENT** is made and entered into this \_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_, ("Interconnection Customer") and the California Independent System Operator Corporation, a California nonprofit public benefit corporation existing under the laws of the State of California, ("CAISO"). The Interconnection Customer and the CAISO each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

**WHEREAS**, the Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_; and

**WHEREAS**, the Interconnection Customer desires to interconnect the Large Generating Facility with the CAISO Controlled Grid; and

**WHEREAS**, the Interconnection Customer has requested the CAISO to conduct or cause to be performed Interconnection Studies to assess the system impact of interconnecting the Large Generating Facility to the CAISO Controlled Grid and to specify and estimate the cost of the equipment, engineering, procurement and construction work needed on the Participating TO's electric system in accordance with Good Utility Practice to physically and electrically connect the Large Generating Facility to the CAISO Controlled Grid;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the CAISO's FERC-approved Large Generation Interconnection Procedures in CAISO Tariff Appendix GG ("LGIP") or the Master Definitions Supplement, Appendix A to the CAISO Tariff, as applicable.
- 2.0 The Interconnection Customer elects and the CAISO shall conduct or cause to be performed Interconnection Studies, including any accelerated Interconnection Study, consistent with the LGIP in accordance with the CAISO Tariff.
- 3.0 The scope of the Interconnection Studies shall be subject to the assumptions set forth in Appendices A and B to this Agreement.

- 4.0 The Interconnection Studies will be based upon the technical information provided by the Interconnection Customer in the Interconnection Request, as may be modified as the result of the Scoping Meeting, subject to any modifications in accordance with Section 6.7.2 of the LGIP and modifications to the proposed Commercial Operation Date of the Large Generating Facility permitted by the LGIP. The CAISO reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Studies. If the Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the Interconnection Studies may be modified as specified in the LGIP.
- 5.0 The Interconnection Study report for each Interconnection Study shall provide the information specified in the LGIP.
- 6.0 The Interconnection Customer shall provide an Interconnection Study Deposit, a Site Exclusivity Deposit, if applicable, and other Interconnection Financial Security for the performance of the Interconnection Studies in accordance with the provisions of Sections 3.5.1 and 9 of the LGIP.

Following the issuance of an Interconnection Study report, the CAISO shall charge and the Interconnection Customer shall pay its share of the actual costs of the Interconnection Study pursuant to Sections 3.5.1 and 7.8 of the LGIP.

Any difference between the deposits made toward the Interconnection Study process and associated administrative costs, including any accelerated studies, and the actual cost of the Interconnection Studies and associated administrative costs shall be paid by or refunded to the Interconnection Customer, in the appropriate allocation, in accordance with Section 3.5.1 of the LGIP.

- 7.0 Pursuant to Section 3.7 of the LGIP, the CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems. The CAISO may provide a copy of the Phase I Interconnection Study results to an Affected System Operator and the Western Electricity Coordinating Council. Requests for review and input from Affected System Operators or the Western Electricity Coordinating Council may arrive at any time prior to interconnection.
- 8.0 Substantial portions of technical data and assumptions used to perform the Phase I Interconnection Study, such as system conditions, existing and planned generation, and unit modeling, may change after the CAISO provides the Interconnection Study results to the Interconnection Customer. Interconnection Study results will reflect available data at the time the CAISO provides the Phase I Interconnection Study report to the Interconnection Customer. The CAISO shall not be responsible for any additional costs, including, without limitation, costs of new or additional facilities, system upgrades, or schedule changes, that may be incurred by the Interconnection Customer as a result of changes in such data and assumptions.

- 9.0 **[NOT USED]**
- 10.0 The CAISO shall maintain records and accounts of all costs incurred in performing the Interconnection Study in sufficient detail to allow verification of all costs incurred, including associated overheads. The Interconnection Customer shall have the right, upon reasonable notice, within a reasonable time at the CAISO's offices and at its own expense, to audit the CAISO's records as necessary and as appropriate in order to verify costs incurred by the CAISO. Any audit requested by the Interconnection Customer shall be completed, and written notice of any audit dispute provided to the CAISO representative, within one hundred eighty (180) calendar days following receipt by the Interconnection Customer of the CAISO's notification of the final costs of the Interconnection Study.
- 11.0 In accordance with Section 3.8 of the LGIP, the Interconnection Customer may withdraw its Interconnection Request at any time by written notice to the CAISO. Upon receipt of such notice, this Agreement shall terminate, subject to the requirements of Section 3.5.1 and 13.1 of the LGIP.
- 12.0 Pursuant to Section 4 of the LGIP, this Agreement shall become effective upon the date the fully executed Agreement is received by the CAISO. If the CAISO does not receive the fully executed Agreement and deposit or other Interconnection Financial Security pursuant to Section 3.5.1 of the LGIP, then the Interconnection Request will be deemed withdrawn upon the Interconnection Customer's receipt of written notice by the CAISO pursuant to Section 3.8 of the LGIP.
- 13.0 Miscellaneous.
- 13.1 Dispute Resolution. Any dispute, or assertion of a claim, arising out of or in connection with this Agreement, shall be resolved in accordance with Section 13.5 of the LGIP.
- 13.2 Confidentiality. Confidential Information shall be treated in accordance with Section 13.1 of the LGIP.
- 13.3 Binding Effect. This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 13.4 Conflicts. In the event of a conflict between the body of this Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.

- 13.5 Rules of Interpretation. This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article or Section of this Agreement or such Appendix to this Agreement, or such Section of the LGIP or such Appendix to the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article, Section, or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".
- 13.6 Entire Agreement. This Agreement, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.
- 13.7 No Third Party Beneficiaries. This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.
- 13.8 Waiver. The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO or CAISO. Any waiver of this Agreement shall, if requested, be provided in writing.

Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.

- 13.9 Headings. The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.
- 13.10 Multiple Counterparts. This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 13.11 Amendment. The Parties may by mutual agreement amend this Agreement by a written instrument duly executed by both of the Parties.
- 13.12 Modification by the Parties. The Parties may by mutual agreement amend the Appendices to this Agreement by a written instrument duly executed by both of the Parties. Such amendment shall become effective and a part of this Agreement upon satisfaction of all applicable laws and regulations.
- 13.13 Reservation of Rights. The CAISO shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 13.14 No Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.



13.15 Assignment. This Agreement may be assigned by a Party only with the written consent of the other Party; provided that a Party may assign this Agreement without the consent of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; and provided further that the Interconnection Customer shall have the right to assign this Agreement, without the consent of the other Party, for collateral security purposes to aid in providing financing for the Large Generating Facility, provided that the Interconnection Customer will require any secured party, trustee or mortgagee to notify the other Party of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Section will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the other Party of the date and particulars of any such exercise of assignment right(s). Any attempted assignment that violates this Section is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

**IN WITNESS THEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

**California Independent System Operator Corporation**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[Insert name of the Interconnection Customer]**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Appendix A**

**Large Generator Interconnection  
Study Process Agreement**

**ASSUMPTIONS USED IN CONDUCTING THE  
PHASE I INTERCONNECTION STUDY**

The Phase I Interconnection Study will be based upon the information set forth in the Interconnection Request and agreed upon in the Scoping Meeting held on \_\_\_\_\_, subject to any modifications in accordance with Section 6.7.2 of the LGIP, and the following assumptions:

Designation of Point of Interconnection and configuration to be studied.

Deliverability status requested (full capacity or Energy only)

**Appendix B**

**Large Generator Interconnection  
Study Process Agreement**

**DATA FORM TO BE PROVIDED BY THE INTERCONNECTION CUSTOMER  
PRIOR TO COMMENCEMENT OF THE PHASE II INTERCONNECTION STUDY**

Generating Facility size (MW): \_\_\_\_\_

Provide two copies of this completed form and other required plans and diagrams in accordance with Section 7.1 of the LGIP.

Provide location plan and one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.

One set of metering is required for each generation connection to the new bus or existing CAISO Controlled Grid station. Number of generation connections: \_\_\_\_\_

On the one line indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)

On the one line indicate the location of auxiliary power. (Minimum load on CT/PT)

Will an alternate source of auxiliary power be available during CT/PT maintenance?  
Yes \_\_\_\_\_ No \_\_\_\_\_

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? \_\_\_\_\_Yes \_\_\_\_\_No  
(Please indicate on one line).

What type of control system or PLC will be located at the Interconnection Customer's Large Generating Facility?

\_\_\_\_\_  
\_\_\_\_\_

What protocol does the control system or PLC use?

\_\_\_\_\_  
\_\_\_\_\_

Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.



**Appendix 4 to LGIP**

**AGREEMENT FOR THE ALLOCATION OF RESPONSIBILITIES WITH REGARD TO  
LARGE GENERATOR INTERCONNECTION PROCEDURES AND INTERCONNECTION STUDY  
AGREEMENTS**

This Agreement for the Allocation of Responsibilities With Regard to Large Generator Interconnection Procedures and Interconnection Study Agreements ("Agreement"), dated \_\_\_\_\_, is entered into between the California Independent System Operator Corporation ("CAISO") and **[NAME OF PTO]** \_\_\_\_\_ ("PTO"). The CAISO and PTO are jointly referred to as the "Parties" and individually, as a "Party."

WHEREAS, this Agreement will ensure an independent assessment of new Large Generating Facility impacts on the CAISO Controlled Grid and take advantage of the respective expertise of the Parties to facilitate efficient and cost effective Interconnection Study procedures in a manner consistent with the Federal Energy Regulatory Commission's ("FERC") July 1, 2005 Order (112 FERC ¶ 61,009), FERC's August 26, 2005 Order (112 FERC ¶ 61,231), and prior FERC Orders recognizing that Order No. 2003 did not allocate responsibilities between transmission owners and transmission providers for the provision of Interconnection Service and suggesting those parties enter into an agreement to allocate those responsibilities. Southwest Power Pool, Inc., 106 FERC ¶ 61,254 (2004).

NOW THEREFORE, in view of the respective responsibilities assigned to the Parties and the foregoing FERC orders, and the provisions of the CAISO's Large Generator Interconnection Procedures set forth in CAISO Tariff Appendix GG ("LGIP"), the CAISO and PTO agree to the following allocation of responsibilities for a centralized Interconnection Study process under the direction and oversight of the CAISO:

**1. DEFINITIONS.**

Unless otherwise defined herein, all capitalized terms shall have the meaning set forth in the CAISO Tariff.

**2. TERM OF AGREEMENT.**

This Agreement shall become effective upon the date specified in the first paragraph above and shall remain in effect until (1) terminated by all Parties in writing, or (2) with respect to the PTO, upon the termination of that entity's status as a PTO pursuant to the Transmission Control Agreement, as amended from time to time.

**3. PROVISIONS FOR ALLOCATION OF RESPONSIBILITIES BETWEEN CAISO AND PTO.**

**3.1 Interconnection Service:** The Parties acknowledge that, as the transmission provider, the CAISO is responsible for reliably operating the transmission grid. The Parties also recognize that while the CAISO is a transmission provider under the CAISO Tariff, the CAISO does not own any transmission facilities, and the PTO owns, constructs, and maintains the facilities to which Large Generating Facilities are to be interconnected, and that the PTO may construct or modify facilities to allow the interconnection. While the Parties recognize that the CAISO will be responsible for conducting or causing to be performed Interconnection Studies and similar studies, the PTO will participate in these studies and conduct certain portions of studies, under the direction and oversight of, and approval by, the CAISO, as provided in this Agreement. The CAISO shall not enter into any Interconnection Study agreement with an Interconnection Customer that is contrary to these rights.

**3.2 [INTENTIONALLY LEFT BLANK]**

**3.3 Transmission Owners' Right to Participation in Studies, Committees and Meetings:**

**3.3.1** In the event that an Interconnection Customer proposes to interconnect a Large Generating Facility with the PTO's facilities, or the PTO is an owner of an affected system, the PTO shall have the right to participate in any Interconnection Study or any other study conducted in connection with such request for Interconnection Service. "Participate" in this Section 3.3.1 means physically perform any study or portion thereof in connection with an Interconnection Request, under the direction and oversight of, and approval by, the CAISO pursuant to Section 3.4 of this Agreement; provide or receive input, data or other information regarding any study or portion thereof consistent with Section 3.4 of this Agreement; and, when any study or portion thereof in connection with an Interconnection Request is physically performed by an entity other than the PTO, perform activities necessary to adequately review or validate, as appropriate, any results of the study or portions thereof and provide recommendations.

**3.3.2** In the event that an Interconnection Customer proposes to interconnect a Large Generating Facility with the PTO's facilities, or the PTO is an owner of an affected system, the PTO shall have the right to participate in all meetings expressly established pursuant to the CAISO LGIP. As appropriate, the PTO may participate in all other material or substantive communications in connection with an Interconnection Request.

**3.4 Interconnection Study Responsibility Allocation:** In complying with its responsibility for conducting or causing to be performed Interconnection Studies, the CAISO will assign responsibility for performance of portions of the Interconnection Studies to the PTO, under the direction and oversight of, and approval by, the CAISO, as set forth in Attachment A, except as specifically qualified as follows:

**3.4.1** For any tasks specifically assigned to the PTO pursuant to Attachment A or otherwise mutually agreed upon by the CAISO and the PTO, the CAISO reserves the right, on a case-by-case basis, to perform or reassign to a mutually agreed upon and pre-qualified contractor such task only where: (a) the quality and accuracy of prior PTO Interconnection Study work product resulting from assigned tasks has been deemed deficient by the CAISO, the CAISO has notified the PTO pursuant to the notice provision of Section 4.16 of this Agreement in writing of the deficiency, and the deficiency has not been cured pursuant to Section 3.4.2 of this Agreement; (b) the timeliness of PTO Interconnection Study work product has been deemed deficient, and either (i) the CAISO has not been notified of the reasons and actions taken to address the timeliness of the work, or (ii) if notified, the stated reasons and actions taken are insufficient or unjustifiable and the PTO has not cured the deficiency pursuant to Section 3.4.2 of this Agreement; (c) the PTO has failed, in a mutually agreed upon timeframe, to provide the CAISO with information or data related to an Interconnection Request despite a written request by the CAISO, pursuant to Section 3.5 hereof, to do so, and such data is the responsibility of the PTO to provide to the CAISO, subject to Section 4.3 of this Agreement; (d) the PTO

advises the CAISO in writing that it does not have the resources to adequately or timely perform the task according to the applicable timelines set forth in Attachment A; or (e) the estimated cost of the PTO performing the task has been determined in writing by the CAISO to significantly exceed the cost of the CAISO or mutually agreed upon contractor performing the task, inclusive of the costs that will be incurred by the PTO in exercising its review rights of the results of any such tasks performed by such third party(ies). If the CAISO deviates from the assignments set forth in Attachment A based on the foregoing factors, the CAISO will provide the PTO with a written explanation for the deviation and any associated reassignments of work. The PTO may contest the deviation pursuant to the Dispute Resolution procedures set forth in Section 4.1 of this Agreement.

Task(s) may only be reassigned in accordance with this Section 3.4.1 where the PTO has been deemed to be deficient in relation to that (those) particular task(s).

**3.4.2 Cure for reassigned Interconnection Study work**

The CAISO shall not reassign task(s) without the opportunity to cure, as specified in Section 3.4.1 of this Agreement. The following actions will serve to cure the deficiencies and result in restoring the assignment(s) as provided in Attachment A:

- (a) The CAISO and PTO shall negotiate in good faith and agree to a corrective action plan proposed by the PTO, including a reasonably adequate cure period, and the corrective action plan is satisfactorily implemented.
- (b) The CAISO determines the deficiency is cured without an action plan.

**3.4.3** Assessment of prior PTO Interconnection Study work shall only be based on work conducted under the process that becomes effective concurrent with the effective date of this Agreement. Further, assessment of prior PTO Interconnection Study work shall be based on work conducted no earlier than the eighteen (18) month period prior to the date of the CAISO notice of deviation from assignments set forth in Attachment A to this Agreement.

**3.5 Information Exchange:** The PTO shall provide the CAISO, subject to confidentiality requirements in Section 4.3 of this Agreement, with any documentation or data requested by the CAISO reasonably necessary to permit the CAISO to perform, review, validate and approve any Interconnection Study, or portion thereof, performed by the PTO. The CAISO shall provide the PTO with any documentation or data requested by the PTO, subject to confidentiality requirements in Section 4.3 of this Agreement, reasonably necessary to perform, review, and validate any Interconnection Study, or portion thereof.

**3.6 Consistency with Provisions for Centralized Interconnection Study Process:** The CAISO and PTO have determined that the processes and allocation of responsibilities in Section 3.4 of this Agreement ensure that impacts to the CAISO Controlled Grid are independently assessed and that the assignment of responsibilities minimizes handoffs, takes advantage of non-transferable skills, and promotes the efficiency and cost-effectiveness of the centralized Interconnection Study processes, consistent with LGIP Section 3.2.

- 3.7 Re-Studies:** If any re-studies are required, the CAISO will confer with the PTO as to the need for a re-study. The CAISO will make the final determination regarding the need for a re-study, subject to dispute resolution procedures.
- 3.8 Use of Contractors:** Nothing in this Agreement shall prevent either the CAISO or the PTO from using qualified, mutually agreed upon third party contractors to meet that Party's rights or obligations under this Agreement or the LGIP. To promote the efficiency of the process, the CAISO and PTO will collaborate to identify a list of the mutually agreed to qualified contractors available to the Parties.
- 3.9 Performance Standards:** Each Party shall perform all of its obligations under the LGIP, this Agreement, and any FERC approved Interconnection Study procedures that may be adopted by the CAISO to implement the LGIP or this Agreement in accordance with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice.
- 3.10 Recovery of Costs:** In accordance with Section 3.5.1 of the LGIP, the PTO shall recover all actual costs from the CAISO incurred in performing Interconnection Studies or portions thereof assigned to it by the CAISO, including all costs incurred in exercising its right to review, and make recommendations on, Interconnection Studies or portions thereof performed by the CAISO and/or contractors under Section 3.8 of this Agreement.

#### 4. GENERAL TERMS AND CONDITIONS.

- 4.1 Dispute Resolution:** In the event any dispute regarding the terms, conditions, and performance of this Agreement is not settled informally, the Parties shall follow the CAISO ADR Procedures set forth in Section 13 of the CAISO Tariff.
- 4.2 Liability:** No Party to this Agreement shall be liable to any other Party for any direct, indirect, special, incidental or consequential losses, damages, claims, liabilities, costs or expenses (including attorneys fees and court costs) arising from the performance or non-performance of its obligations under this Agreement regardless of the cause (including intentional action, willful action, gross or ordinary negligence, or force majeure); provided, however, that a Party may seek equitable or other non-monetary relief as may be necessary to enforce this Agreement and that damages for which a Party may be liable to another Party under another agreement will not be considered damages under this Agreement.
- 4.3 Confidentiality:** Confidential Information shall be treated in accordance with Section 13.1 of the LGIP.
- 4.4 Binding Effect:** This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 4.5 Conflicts:** In the event of a conflict between the body of this Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.



- 4.6 Rules of Interpretation:** This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section, Attachment, or Appendix means such Article or Section of this Agreement or such Attachment or Appendix to this Agreement, or such Section of the LGIP or such Appendix to the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article or Section; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".
- 4.7 Entire Agreement:** This Agreement, including all Attachments hereto, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, among the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants, which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.
- 4.8 No Third Party Beneficiaries:** This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.
- 4.9 Waiver:** The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party. Any waiver at any time by a Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Any waiver of this Agreement shall, if requested, be provided in writing. Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.

- 4.10 Headings:** The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.
- 4.11 Multiple Counterparts:** This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 4.12 Modification by the Parties:** The Parties may amend this Agreement and any Appendices to this Agreement only (1) by mutual agreement of the Parties by a written instrument duly executed by the Parties, subject to FERC approval or (2) upon the issuance of a FERC order, pursuant to Section 206 of the Federal Power Act. It is the Parties' intent that FERC's right to change any provision of this Agreement shall be limited to the maximum extent permissible by law and that any such change, if permissible, shall be in accordance with the Mobile-Sierra public interest standard applicable to fixed rate agreements. *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956). Such amendment shall become effective and a part of this Agreement upon satisfaction of all applicable laws and regulations. Notwithstanding the foregoing, Attachment B (Notices) may be modified as set forth in Section 4.15 of this Agreement, and the CAISO and the PTO may from time to time mutually agree to deviate from Attachment A in accordance with the provisions of this Agreement, however, such deviation shall be subject to Section 4.9 of this Agreement and not considered a course of dealing.
- 4.13 No Partnership:** This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.
- 4.14 Assignment:** This Agreement may be assigned by a Party only with the written consent of the other Parties; provided that a Party may assign this Agreement without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.
- 4.15 Notices:** Any notice, demand, or request provided in this Agreement, or served, given, or made in connection with it, will be in writing and deemed properly served, given, or made if delivered in person, transmitted by facsimile, or sent by United States mail, postage prepaid, to the persons specified in Attachment B hereto unless otherwise provided in this Agreement. Any Party may at any time, by notice to all other Parties, change the designation or address of the person specified in Attachment B as the person who receives notices pursuant to this Agreement.

**IN WITNESS WHEREOF**, the Parties have executed this Agreement in multiple originals, each of which shall constitute and be an original effective agreement among the Parties.

**California Independent System Operator Corporation**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[NAME OF PTO]**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## ATTACHMENT A

### INTERCONNECTION STUDY RESPONSIBILITY ALLOCATION

Description of Large Generator Interconnection Process: Roles and Responsibilities of CAISO and PTOs.

**Purpose:** This Attachment A to the “AGREEMENT FOR THE ALLOCATION OF RESPONSIBILITIES WITH REGARD TO LARGE GENERATOR INTERCONNECTION PROCEDURES AND INTERCONNECTION STUDY AGREEMENTS” serves as further clarification of the roles and responsibilities of the parties to this Agreement. The CAISO will assign responsibility for performance of portions of the Interconnection Studies to the relevant PTOs, under the direction and oversight of, and approval by, the CAISO, as set forth in this Attachment A. This document serves as a general overview of only the roles and responsibilities as between the CAISO and PTOs. This Agreement does not include the process steps, involvement or obligations of the Interconnection Customer (IC). This Agreement is not inclusive of all procedures necessary to comply with all provisions of the LGIA, LGIP and Large Generator Interconnection Study Process Agreement.

#### Interconnection Request (IR) Process

1. CAISO forwards the IR to the PTO within three (3) Business Days (BD) of receipt of IR from Interconnection Customer (IC)
2. PTO(s) provides any feed back regarding IR to CAISO within 3 BD
3. CAISO distributes draft Scoping Meeting minutes for review within 5 BD of Scoping Meeting.
4. PTO(s) provide any comments to the Scoping Meeting minutes within 2 BD of receipt of draft Scoping Meeting minutes.
5. CAISO issues the final Scoping Meeting minutes within 3 BD of receipt of comments.

**Phase I Interconnection Study Timeline**

| Line  | Initial (Phase I) Cluster Study   | Typical Calendar Days | Timeline (Days) |
|---|---|-----------------------|-----------------|
| 1   | CAISO and PTOs develop initial Generating Facility groups for initial Dispatch assumptions and cost allocation purposes (except for thermal overload mitigation).   | 7                     | 1-7             |
| 2   | PTOs develop draft Base Cases, each representing all Generating Facilities in the queue cluster, and deliver to CAISO.  | 21                    | 1-21            |
| 3   | PTO develops preferred and alternative, if applicable, direct interconnection plans, including the need for an Interconnection Grid Substation (IGS).   | 25                    | 22-46           |
| 4   | PTO develops draft contingency lists.   | 25                    | 22-46           |
| 5   | CAISO reviews and approves Base Cases and direct interconnection plans and merges them together, as needed.<br>CAISO updates summer peak Base Cases to reflect withdrawn projects from previous queue cluster study. PTOs update off-peak Base Cases.<br>CAISO reviews and approves contingency lists. PTO needs time to consider CAISO proposed changes. | 21                    | 47-67           |
| 6   | CAISO provides Deliverability Assessment results identifying constrained facilities, using summer peak Base Cases, and prepares results summary and may propose mitigation plans for PTO review.  | 21                    | 68-88           |
| 7   | At the CAISO's direction, the PTO performs the off-peak Load Flow, and summer peak and off-peak Post Transient and Stability analyses and identifies mitigation solutions, as appropriate, and submits draft study results to CAISO for review and direction.   | 21                    | 68-88           |
| 8   | PTO develops mitigation plans for summer peak and off-peak or supplements CAISO proposed mitigation plans for consideration, as appropriate, and submits to CAISO for review and direction  | 21                    | 89-109          |
| 9   | CAISO retests Deliverability Assessment results with proposed Delivery Network Upgrades and withdrawn projects from previous cluster study removed. PTO reviews and comments on retest results.   | 14                    | 110-123         |
| 10  | CAISO develops shift factors for cost allocation purposes of all Network Upgrades associated with mitigating thermal overloads.   | 7                     | 124-130         |
| <b>Short Circuit Duty (concurrent with the LF/PT/S)</b> |   |                       |                 |
| 11  | CAISO coordinates with other potentially affected facility owners. <sup>1</sup>   | n/a                   | n/a             |

<sup>1</sup> In accordance with the WECC Short Circuit Duty Procedure

|  |   |    |         |
|--|---|----|---------|
| 12   | CAISO directs PTO to develop Base Case and run short circuit analysis.  | 21 | 46-66   |
| 13   | PTO performs facilities review. (Note: possibly for feedback into the power flow studies and PTO mitigation plans.)   | 28 | 67-94   |
| 14   | PTO prepares draft study results and submits to the CAISO for review and direction.   | 28 | 95-123  |
| <b>Facility cost estimates and schedules</b> |   |    |         |
| 15   | At the CAISO's direction, PTO(s) prepares cost estimates and schedules for the direct assignment facilities and Network Upgrades identified in the power flow, short circuit duty, post transient, and stability studies.   | 20 | 124-143 |
| <b>Final Report</b>                          |   |    |         |
| 16   | At the CAISO's direction, PTO(s) prepares draft report for impacts in its service territory.  | 7  | 144-150 |
| 17   | CAISO compiles all results into a draft report that covers grid impacts, as appropriate. CAISO reviews integrated draft report and submits comments, recommendations and direction to the PTO.  | 9  | 151-159 |
| 18   | PTO incorporates CAISO's directions, conclusions and recommendations. If CAISO conclusions and recommendations conflict with PTO conclusions, then CAISO and PTO must coordinate to resolve conflicts. Any remaining conflicts must be noted in the final report. | 14 | 160-173 |
| 19   | PTO submits final draft report to the CAISO. The CAISO will finalize the report and tender the CAISO approved report to the ICs.  |    |         |
| <b>Final Study Report</b>                    |   |    |         |
| 20   | CAISO provides final approved report to ICs, PTO, and any applicable Affected Systems.  | 7  | 174-180 |

**Phase II Interconnection Study Process\*\***

\*\*All Interconnection Studies will be under the direction and oversight of, and approval by, the CAISO and may involve more than one PTO.

| Line | Standard Project Refinement and Facilities Study   | Typical Calendar Days | Timeline (Days) |
|------|--|-----------------------|-----------------|
| 21   | PTOs update Base Cases from Phase I Interconnection Study line 5 to remove projects that have withdrawn.   | 30                    | 1-30            |
| 22   | CAISO reviews and approves Base Cases.   |                       |                 |
| 23   | CAISO and PTOs update studies performed in Phase I lines 6-14 using Base Cases from line 22. Additional alternatives may be considered that address future generation development potential, meet load serving capability, and economic benefit objectives, and phased development and option value of transmission projects to address uncertainty. | 120                   | 31-150          |

|                                     |  |    |          |
|-------------------------------------|--|----|----------|
| 23.1                                | Projects from line 23 requiring CPUC or CAISO Governing Board approval may need to go through the Transmission Planning Process stakeholder process. After completing the stakeholder review process, these projects would proceed through the activities described in lines 24 through 32. Projects not requiring CPUC or CAISO Governing Board approval, or that have already gone through a stakeholder process, would proceed immediately to the activities described in lines 24 through 32. (See Appendix C of the CAISO's proposal for the generator interconnection process reform.) |    |          |
| 24                                  | PTOs develop draft off-peak and summer peak operating year Base Cases as appropriate where each case includes all Generating Facilities in Phase II Interconnection Study having the same operating date and deliver to CAISO.   | 30 | 151-180* |
| 25                                  | CAISO reviews and approves cases from line 24.   |    |          |
| 26                                  | At the CAISO's direction, the PTOs perform operational studies using cases from line 25 to determine Network Upgrade requirements for each study year and identify any special operational requirements to connect projects in the year of study.  | 45 | 181-225* |
| 27                                  | At the CAISO's direction, the PTOs perform additional operational studies to identify the optimal approach for building out the overall plan of service on a segmented (i.e. building block) basis acknowledging that portions of the overall plan of service may be staged in segments over time.   | 30 | 226-255* |
| <b>Final Plan of Service Report</b> |  |    |          |
| 28                                  | At the CAISO's direction, PTO(s) prepares draft plan of service report.  | 7  | 256-262* |
| 29                                  | CAISO reviews draft plan of service report and submits comments, recommendations and direction to the PTO.   | 9  | 263-271* |
| 30                                  | PTO incorporates CAISO directions, conclusions and recommendations. If CAISO conclusions and recommendations conflict with PTO conclusions, then CAISO and PTO must coordinate to resolve conflicts. Any remaining conflicts must be noted in the final report.  | 14 | 272-285* |
| 31                                  | PTO submits final draft report to the CAISO. The CAISO will finalize the report.   |    |          |
| <b>Facility Costs and Schedules</b> |  |    |          |
| 32                                  | At the CAISO's direction, PTO(s) prepares detailed cost estimates and schedules for the direct assignment facilities and Network Upgrades identified in the overall plan of service and including individual segments.   | 75 | 256-330* |

\* For projects going through the Transmission Planning Process as described in Line 23.1, the activities in lines 24 through 32 may be delayed until the Network Upgrade plan is approved through the Transmission Planning Process. However, the subsequent cluster study would proceed on schedule based on the plan of service from line 23.

**ATTACHMENT B**  
**CONTACTS FOR NOTICES**

**[Section 4.15]**

**California ISO**

Manager, Transmission Engineering  
151 Blue Ravine Road  
Folsom, CA 95630  
Phone: 916.351.2104  
Fax: 916.351.2264

**[NAME OF PTO]**

[Address of PTO]



**Attachment A3 – Clean Sheets**  
**Generation Interconnection Process Reform Amendment Filing**

**Currently Effective CAISO Tariff**

**CAISO TARIFF APPENDIX HH**

**Large Generator Interconnection Agreement  
for Interconnection Requests in a Queue Cluster Window**

**LARGE GENERATOR INTERCONNECTION AGREEMENT (LGIA)**  
**[INTERCONNECTION CUSTOMER]**  
**[PARTICIPATING TO]**  
**CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

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**LARGE GENERATOR INTERCONNECTION AGREEMENT**

**[INTERCONNECTION CUSTOMER]**

**[PARTICIPATING TO]**

**CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

**THIS LARGE GENERATOR INTERCONNECTION AGREEMENT** ("LGIA") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and among \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ ("Interconnection Customer" with a Large Generating Facility), \_\_\_\_\_, a corporation organized and existing under the laws of the State of California ("**Participating TO**"), and **California Independent System Operator Corporation**, a California nonprofit public benefit corporation organized and existing under the laws of the State of California ("CAISO"). Interconnection Customer, Participating TO, and CAISO each may be referred to as a "Party" or collectively as the "Parties."

**RECITALS**

**WHEREAS**, CAISO exercises Operational Control over the CAISO Controlled Grid; and

**WHEREAS**, the Participating TO owns, operates, and maintains the Participating TO's Transmission System; and

**WHEREAS**, Interconnection Customer intends to own, lease and/or control and operate the Generating Facility identified as a Large Generating Facility in Appendix C to this LGIA; and

**WHEREAS**, Interconnection Customer, Participating TO, and CAISO have agreed to enter into this LGIA for the purpose of interconnecting the Large Generating Facility with the Participating TO's Transmission System;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein, it is agreed:

When used in this LGIA, terms with initial capitalization that are not defined in Article 1 shall have the meanings specified in the Article in which they are used.

**ARTICLE 1. DEFINITIONS**

**Adverse System Impact** shall mean the negative effects due to technical or operational limits on conductors or equipment being exceeded that may compromise the safety and reliability of the electric system.

**Affected System** shall mean an electric system other than the CAISO Controlled Grid that may be affected by the proposed interconnection, including the Participating TO's electric system that is not part of the CAISO Controlled Grid.

**Affiliate** shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Council** shall mean the Western Electricity Coordinating Council or its successor.

**Applicable Reliability Standards** shall mean the requirements and guidelines of NERC, the Applicable Reliability Council, and the Balancing Authority Area of the Participating TO's Transmission System to which the Generating Facility is directly interconnected.

**Balancing Authority** shall mean the responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.

**Balancing Authority Area** shall mean the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.

**Base Case** shall mean the base case power flow, short circuit, and stability data bases used for the Interconnection Studies.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of this LGIA.

**Breaching Party** shall mean a Party that is in Breach of this LGIA.

**Business Day** shall mean Monday through Friday, excluding federal holidays and the day after Thanksgiving Day.

**CAISO Controlled Grid** shall mean the system of transmission lines and associated facilities of the parties to the Transmission Control Agreement that have been placed under the CAISO's Operational Control.

**CAISO Tariff** shall mean the CAISO's tariff, as filed with FERC, and as amended or supplemented from time to time, or any successor tariff.

**Calendar Day** shall mean any day including Saturday, Sunday or a federal holiday.

**Commercial Operation** shall mean the status of an Electric Generating Unit or project phase at a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

**Commercial Operation Date** of an Electric Generating Unit or project phase shall mean the date on which the Electric Generating Unit or project phase at the Generating Facility commences Commercial Operation as agreed to by the applicable Participating TO, the CAISO, and the Interconnection Customer pursuant to Appendix E to this LGIA, and in accordance with the implementation plan agreed to by the Participating TO and the CAISO for multiple individual Electric Generating Units or project phases at a Generating Facility where an Interconnection Customer intends to establish separate Commercial Operation Dates for those Electric Generating Units or project phases.

**Confidential Information** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, subject to Article 22.1.2.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of this LGIA.

**Distribution System** shall mean those non-CAISO-controlled transmission and distribution facilities owned by the Participating TO.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to the Participating TO's Distribution System. Distribution Upgrades do not include Interconnection Facilities.

**Effective Date** shall mean the date on which this LGIA becomes effective upon execution by all Parties subject to acceptance by FERC, or if filed unexecuted, upon the date specified by FERC.

**Electric Generating Unit** shall mean an individual electric generator and its associated plant and apparatus whose electrical output is capable of being separately identified and metered.

**Emergency Condition** shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the CAISO, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the CAISO Controlled Grid or the electric systems of others to which the CAISO Controlled Grid is directly connected; (3) that, in the case of the Participating TO, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Participating TO's Transmission System, Participating TO's Interconnection Facilities, Distribution System, or the electric systems of others to which the Participating TO's electric system is directly connected; or (4) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions; provided, that Interconnection Customer is not obligated by this LGIA to possess black start capability.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**Federal Power Act** shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a et seq.

**FERC** shall mean the Federal Energy Regulatory Commission or its successor.

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**Generating Facility** shall mean the Interconnection Customer's Electric Generating Unit(s) used for the production of electricity identified in the Interconnection Customer's Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Generating Facility Capacity** shall mean the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices.

**Good Utility Practice** shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be any one of a number of the optimum practices, methods, or acts to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** shall mean any federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, CAISO, Participating TO, or any Affiliate thereof.

**Hazardous Substances** shall mean any chemicals, materials or substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "hazardous constituents," "restricted hazardous materials," "extremely hazardous substances," "toxic substances," "radioactive substances," "contaminants," "pollutants," "toxic pollutants" or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**Initial Synchronization Date** shall mean the date upon which an Electric Generating Unit is initially synchronized and upon which Trial Operation begins.

**In-Service Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Participating TO's Interconnection Facilities to obtain back feed power.

**Interconnection Customer's Interconnection Facilities** shall mean all facilities and equipment, as identified in Appendix A of this LGIA, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Participating TO's Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Participating TO's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Participating TO's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Financial Security** shall have the meaning assigned to it in Section 1.2 of the LGIP.

**Interconnection Handbook** shall mean a handbook, developed by the Participating TO and posted on the Participating TO's web site or otherwise made available by the Participating TO, describing technical and operational requirements for wholesale generators and loads connected to the Participating TO's portion of the CAISO Controlled Grid, as such handbook may be modified or superseded from time to time. Participating TO's standards contained in the Interconnection Handbook shall be deemed consistent with Good Utility Practice and Applicable Reliability Standards. In the event of a conflict between the terms of this LGIA and the terms of the Participating TO's Interconnection Handbook, the terms in this LGIA shall apply.

**Interconnection Request** shall mean a request, in the form of Appendix 1 to the Large Generator Interconnection Procedures, in accordance with the CAISO Tariff.

**Interconnection Service** shall mean the service provided by the Participating TO and CAISO associated with interconnecting the Interconnection Customer's Generating Facility to the Participating TO's Transmission System and enabling the CAISO Controlled Grid to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of this LGIA, the Participating TO's Transmission Owner Tariff, and the CAISO Tariff.

**Interconnection Study** shall mean either of the following studies: the Phase I Interconnection Study or the Phase II Interconnection Study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), pursuant to the Large Generator Interconnection Procedures.

**IRS** shall mean the Internal Revenue Service.

**Large Generating Facility** shall mean a Generating Facility having a Generating Facility Capacity of more than 20 MW.

**Large Generator Interconnection Procedures (LGIP)** shall mean the CAISO protocol that sets forth the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that is included in CAISO Tariff Appendix GG.

**Large Generator Interconnection Study Process Agreement** shall mean the agreement between the Interconnection Customer and the CAISO for the conduct of the Interconnection Studies.

**Loss** shall mean any and all damages, losses, and claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties.

**Material Modification** shall mean those modifications that have a material impact on the cost or timing of any Interconnection Request or any other valid interconnection request with a later queue priority date.

**Metering Equipment** shall mean all metering equipment installed or to be installed for measuring the output of the Generating Facility pursuant to this LGIA at the metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

**NERC** shall mean the North American Electric Reliability Council or its successor organization.

**Network Upgrades** shall be Participating TO's Delivery Network Upgrades and Participating TO's Reliability Network Upgrades.

**Operational Control** shall mean the rights of the CAISO under the Transmission Control Agreement and the CAISO Tariff to direct the parties to the Transmission Control Agreement how to operate their transmission lines and facilities and other electric plant affecting the reliability of those lines and facilities for the purpose of affording comparable non-discriminatory transmission access and meeting applicable reliability criteria.

**Participating TO's Delivery Network Upgrades** shall mean the additions, modifications, and upgrades to the Participating TO's Transmission System at or beyond the Point of Interconnection, other than Reliability Network Upgrades, identified in the Interconnection Studies, as identified in Appendix A, to relieve constraints on the CAISO Controlled Grid.

**Participating TO's Interconnection Facilities** shall mean all facilities and equipment owned, controlled or operated by the Participating TO from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to this LGIA, including any modifications, additions or upgrades to such facilities and equipment. Participating TO's Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Participating TO's Reliability Network Upgrades** shall mean the additions, modifications, and upgrades to the Participating TO's Transmission System at or beyond the Point of Interconnection, identified in the Interconnection Studies, as identified in Appendix A, necessary to interconnect the Large Generating Facility safely and reliably to the Participating TO's Transmission System, which would not have been necessary but for the interconnection of the Large Generating Facility, including additions, modifications, and upgrades necessary to remedy short circuit or stability problems resulting from the interconnection of the Large Generating Facility to the Participating TO's Transmission System. Participating TO's Reliability Network Upgrades also include, consistent with Applicable Reliability Standards and Applicable Reliability Council practice, the Participating TO's facilities necessary to mitigate any adverse impact the Large Generating Facility's interconnection may have on a path's Applicable Reliability Council rating. Participating TO's Reliability Network Upgrades do not include any Participating TO's Delivery Network Upgrades.

**Participating TO's Transmission System** shall mean the facilities owned and operated by the Participating TO and that have been placed under the CAISO's Operational Control, which facilities form part of the CAISO Controlled Grid.

**Party or Parties** shall mean the Participating TO, CAISO, Interconnection Customer or the applicable combination of the above.

**Phase I Interconnection Study** shall mean the engineering study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), that evaluates the impact of the proposed interconnection on the safety and reliability of the Participating TO's Transmission System and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility(ies) were interconnected without identified project modifications or system modifications, as provided in the On-Peak Deliverability Assessment (as defined in the CAISO Tariff), and other potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Large Generator Interconnection Procedures. The study will also identify the approximate total costs, based on per unit costs, of mitigating these impacts, along with an equitable allocation of those costs to Interconnection Customers for their individual Generating Facilities.

**Phase II Interconnection Study** shall mean an engineering and operational study conducted or caused to be performed by the CAISO once per calendar year, in coordination with the applicable Participating TO(s), to determine the Point of Interconnection and a list of facilities (including the Participating TO's Interconnection Facilities, Network Upgrades, Distribution Upgrades, and Stand Alone Network Upgrades), the cost of those facilities, and the time required to interconnect the Generating Facility(ies) with the Participating TO's Transmission System.

**Point of Change of Ownership** shall mean the point, as set forth in Appendix A to this LGIA, where the Interconnection Customer's Interconnection Facilities connect to the Participating TO's Interconnection Facilities.

**Point of Interconnection** shall mean the point, as set forth in Appendix A to this LGIA, where the Interconnection Facilities connect to the Participating TO's Transmission System.

**QF PGA** shall mean a Qualifying Facility Participating Generator Agreement specifying the special provisions for the operating relationship between a Qualifying Facility and the CAISO, a pro forma version of which is set forth in Appendix B.3 of the CAISO Tariff.



**Qualifying Facility** shall mean a qualifying cogeneration facility or qualifying small power production facility, as defined in the Code of Federal Regulations, Title 18, Part 292 (18 C.F.R. §292).

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under this LGIA, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Scoping Meeting** shall mean the meeting among representatives of the Interconnection Customer, the Participating TO(s), other Affected Systems, and the CAISO conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

**Stand Alone Network Upgrades** shall mean Network Upgrades that the Interconnection Customer may construct without affecting day-to-day operations of the CAISO Controlled Grid or Affected Systems during their construction. The Participating TO, the CAISO, and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to this LGIA.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, that protects (1) the Participating TO's Transmission System, Participating TO's Interconnection Facilities, CAISO Controlled Grid, and Affected Systems from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the CAISO Controlled Grid, Participating TO's Interconnection Facilities, and Affected Systems or on other delivery systems or other generating systems to which the CAISO Controlled Grid is directly connected.

**Transmission Control Agreement** shall mean CAISO FERC Electric Tariff No. 7.

**Trial Operation** shall mean the period during which the Interconnection Customer is engaged in on-site test operations and commissioning of an Electric Generating Unit prior to Commercial Operation.

## ARTICLE 2. EFFECTIVE DATE, TERM AND TERMINATION

**2.1 Effective Date.** This LGIA shall become effective upon execution by all Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by FERC. The CAISO and Participating TO shall promptly file this LGIA with FERC upon execution in accordance with Article 3.1, if required.

**2.2 Term of Agreement.** Subject to the provisions of Article 2.3, this LGIA shall remain in effect for a period of \_\_\_\_ years from the Effective Date (Term Specified in Individual Agreements to be ten (10) years or such other longer period as the Interconnection Customer may request) and shall be automatically renewed for each successive one-year period thereafter.

## **2.3 Termination Procedures.**

**2.3.1 Written Notice.** This LGIA may be terminated by the Interconnection Customer after giving the CAISO and the Participating TO ninety (90) Calendar Days advance written notice, or by the CAISO and the Participating TO notifying FERC after the Generating Facility permanently ceases Commercial Operation.

**2.3.2 Default.** A Party may terminate this LGIA in accordance with Article 17.

**2.3.3 Suspension of Work.** This LGIA may be deemed terminated in accordance with Article 5.16.

**2.3.4** Notwithstanding Articles 2.3.1, 2.3.2, and 2.3.3, no termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this LGIA (if applicable), which notice has been accepted for filing by FERC, and the Interconnection Customer has fulfilled its termination cost obligations under Article 2.4.

**2.4 Termination Costs.** Immediately upon the other Parties' receipt of a notice of the termination of this LGIA pursuant to Article 2.3 above, the CAISO and the Participating TO will determine the total cost responsibility of the Interconnection Customer. If, as of the date of the other Parties' receipt of the notice of termination, the Interconnection Customer has not already paid its share of Network Upgrade costs, as set forth in Appendix G to this LGIA, the Participating TO will liquidate the Interconnection Customer's Interconnection Financial Security associated with its cost responsibility for Network Upgrades, in accordance with Section 9.4 of the LGIP.

The Interconnection Customer will also be responsible for all costs incurred or irrevocably committed to be incurred in association with the construction of the Participating TO's Interconnection Facilities (including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment) and other such expenses, including any Distribution Upgrades for which the Participating TO or CAISO has incurred expenses or has irrevocably committed to incur expenses and has not been reimbursed by the Interconnection Customer, as of the date of the other Parties' receipt of the notice of termination, subject to the limitations set forth in this Article 2.4. Nothing in this Article 2.4 shall limit the Parties' rights under Article 17. If, as of the date of the other Parties' receipt of the notice of termination, the Interconnection Customer has not already reimbursed the Participating TO and the CAISO for costs incurred to construct the Participating TO's Interconnection Facilities, the Participating TO will liquidate the Interconnection Customer's Interconnection Financial Security associated with the construction of the Participating TO's Interconnection Facilities, in accordance with Section 9.4 of the LGIP. If the amount of the Interconnection Financial Security liquidated by the Participating TO under this Article 2.4 is insufficient to compensate the CAISO and the Participating TO for actual costs associated with the construction of the Participating TO's Interconnection Facilities contemplated in this Article, any additional amounts will be the responsibility of the Interconnection Customer, subject to the provisions of Section 9.4 of the LGIP. Any such additional amounts due from the Interconnection Customer beyond the amounts covered by its Interconnection Financial Security will be due to the Participating TO immediately upon termination of this LGIA in accordance with Section 9.4 of the LGIP.

If the amount of the Interconnection Financial Security exceeds the Interconnection Customer's cost responsibility under Section 9.4 of the LGIP, any excess amount will be released to the Interconnection Customer in accordance with Section 9.4 of the LGIP.

- 2.4.1** Notwithstanding the foregoing, in the event of termination by a Party, all Parties shall use commercially Reasonable Efforts to mitigate the costs, damages and charges arising as a consequence of termination. With respect to any portion of the Participating TO's Interconnection Facilities that have not yet been constructed or installed, the Participating TO shall to the extent possible and with the Interconnection Customer's authorization cancel any pending orders of, or return, any materials or equipment for, or contracts for construction of, such facilities; provided that in the event the Interconnection Customer elects not to authorize such cancellation, the Interconnection Customer shall assume all payment obligations with respect to such materials, equipment, and contracts, and the Participating TO shall deliver such material and equipment, and, if necessary, assign such contracts, to the Interconnection Customer as soon as practicable, at the Interconnection Customer's expense. To the extent that the Interconnection Customer has already paid the Participating TO for any or all such costs of materials or equipment not taken by the Interconnection Customer, the Participating TO shall promptly refund such amounts to the Interconnection Customer, less any costs, including penalties, incurred by the Participating TO to cancel any pending orders of or return such materials, equipment, or contracts.
- 2.4.2** The Participating TO may, at its option, retain any portion of such materials, equipment, or facilities that the Interconnection Customer chooses not to accept delivery of, in which case the Participating TO shall be responsible for all costs associated with procuring such materials, equipment, or facilities.
- 2.4.3** With respect to any portion of the Interconnection Facilities, and any other facilities already installed or constructed pursuant to the terms of this LGIA, Interconnection Customer shall be responsible for all costs associated with the removal, relocation or other disposition or retirement of such materials, equipment, or facilities.
- 2.5** **Disconnection.** Upon termination of this LGIA, the Parties will take all appropriate steps to disconnect the Large Generating Facility from the Participating TO's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this LGIA or such non-terminating Party otherwise is responsible for these costs under this LGIA.
- 2.6** **Survival.** This LGIA shall continue in effect after termination to the extent necessary to provide for final billings and payments and for costs incurred hereunder, including billings and payments pursuant to this LGIA; to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this LGIA was in effect; and to permit each Party to have access to the lands of the other Parties pursuant to this LGIA or other applicable agreements, to disconnect, remove or salvage its own facilities and equipment.

### ARTICLE 3. REGULATORY FILINGS AND CAISO TARIFF COMPLIANCE

- 3.1 Filing.** The Participating TO and the CAISO shall file this LGIA (and any amendment hereto) with the appropriate Governmental Authority(ies), if required. The Interconnection Customer may request that any information so provided be subject to the confidentiality provisions of Article 22. If the Interconnection Customer has executed this LGIA, or any amendment thereto, the Interconnection Customer shall reasonably cooperate with the Participating TO and CAISO with respect to such filing and to provide any information reasonably requested by the Participating TO or CAISO needed to comply with applicable regulatory requirements.
- 3.2 Agreement Subject to CAISO Tariff.** The Interconnection Customer will comply with all applicable provisions of the CAISO Tariff, including the LGIP.
- 3.3 Relationship Between this LGIA and the CAISO Tariff.** With regard to rights and obligations between the Participating TO and the Interconnection Customer, if and to the extent a matter is specifically addressed by a provision of this LGIA (including any appendices, schedules or other attachments to this LGIA), the provisions of this LGIA shall govern. If and to the extent a provision of this LGIA is inconsistent with the CAISO Tariff and dictates rights and obligations between the CAISO and the Participating TO or the CAISO and the Interconnection Customer, the CAISO Tariff shall govern.
- 3.4 Relationship Between this LGIA and the QF PGA.** With regard to the rights and obligations of a Qualifying Facility that has entered into a QF PGA with the CAISO and has entered into this LGIA, if and to the extent a matter is specifically addressed by a provision of the QF PGA that is inconsistent with this LGIA, the terms of the QF PGA shall govern.

### ARTICLE 4. SCOPE OF SERVICE

- 4.1 Interconnection Service.** Interconnection Service allows the Interconnection Customer to connect the Large Generating Facility to the Participating TO's Transmission System and be eligible to deliver the Large Generating Facility's output using the available capacity of the CAISO Controlled Grid. To the extent the Interconnection Customer wants to receive Interconnection Service, the Participating TO shall construct facilities identified in Appendices A and C that the Participating TO is responsible to construct.

Interconnection Service does not necessarily provide the Interconnection Customer with the capability to physically deliver the output of its Large Generating Facility to any particular load on the CAISO Controlled Grid without incurring congestion costs. In the event of transmission constraints on the CAISO Controlled Grid, the Interconnection Customer's Large Generating Facility shall be subject to the applicable congestion management procedures in the CAISO Tariff in the same manner as all other resources.

- 4.2 Provision of Service.** The Participating TO and the CAISO shall provide Interconnection Service for the Large Generating Facility.

- 4.3 Performance Standards.** Each Party shall perform all of its obligations under this LGIA in accordance with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice, and to the extent a Party is required or prevented or limited in taking any action by such regulations and standards, such Party shall not be deemed to be in Breach of this LGIA for its compliance therewith. If such Party is the CAISO or Participating TO, then that Party shall amend the LGIA and submit the amendment to FERC for approval.
- 4.4 No Transmission Service.** The execution of this LGIA does not constitute a request for, nor the provision of, any transmission service under the CAISO Tariff, and does not convey any right to deliver electricity to any specific customer or point of delivery.
- 4.5 Interconnection Customer Provided Services.** The services provided by Interconnection Customer under this LGIA are set forth in Article 9.6 and Article 13.5.1. Interconnection Customer shall be paid for such services in accordance with Article 11.6.

#### **ARTICLE 5. INTERCONNECTION FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION**

Interconnection Facilities, Network Upgrades, and Distribution Upgrades shall be studied, designed, and constructed pursuant to Good Utility Practice. Such studies, design and construction shall be based on the assumed accuracy and completeness of all technical information received by the Participating TO and the CAISO from the Interconnection Customer associated with interconnecting the Large Generating Facility.

- 5.1 Options.** Unless otherwise mutually agreed among the Parties, the Interconnection Customer shall select the In-Service Date, Initial Synchronization Date, and Commercial Operation Date; and either Standard Option or Alternate Option set forth below for completion of the Participating TO's Interconnection Facilities and Network Upgrades as set forth in Appendix A, Interconnection Facilities, Network Upgrades, and Distribution Upgrades, and such dates and selected option shall be set forth in Appendix B, Milestones.
- 5.1.1 Standard Option.** The Participating TO shall design, procure, and construct the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, using Reasonable Efforts to complete the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades by the dates set forth in Appendix B, Milestones. The Participating TO shall not be required to undertake any action which is inconsistent with its standard safety practices, its material and equipment specifications, its design criteria and construction procedures, its labor agreements, and Applicable Laws and Regulations. In the event the Participating TO reasonably expects that it will not be able to complete the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades by the specified dates, the Participating TO shall promptly provide written notice to the Interconnection Customer and the CAISO and shall undertake Reasonable Efforts to meet the earliest dates thereafter.

- 5.1.2 Alternate Option.** If the dates designated by the Interconnection Customer are acceptable to the Participating TO, the Participating TO shall so notify the Interconnection Customer within thirty (30) Calendar Days, and shall assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities by the designated dates.

If the Participating TO subsequently fails to complete the Participating TO's Interconnection Facilities by the In-Service Date, to the extent necessary to provide back feed power; or fails to complete Network Upgrades by the Initial Synchronization Date to the extent necessary to allow for Trial Operation at full power output, unless other arrangements are made by the Parties for such Trial Operation; or fails to complete the Network Upgrades by the Commercial Operation Date, as such dates are reflected in Appendix B, Milestones; the Participating TO shall pay the Interconnection Customer liquidated damages in accordance with Article 5.3, Liquidated Damages, provided, however, the dates designated by the Interconnection Customer shall be extended day for day for each day that the CAISO refuses to grant clearances to install equipment.

- 5.1.3 Option to Build.** If the dates designated by the Interconnection Customer are not acceptable to the Participating TO, the Participating TO shall so notify the Interconnection Customer within thirty (30) Calendar Days, and unless the Parties agree otherwise, the Interconnection Customer shall have the option to assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades. If the Interconnection Customer elects to exercise its option to assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, it shall so notify the Participating TO within thirty (30) Calendar Days of receipt of the Participating TO's notification that the designated dates are not acceptable to the Participating TO. The Participating TO, CAISO, and Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Appendix A to this LGIA. Except for Stand Alone Network Upgrades, the Interconnection Customer shall have no right to construct Network Upgrades under this option.

- 5.1.4 Negotiated Option.** If the Interconnection Customer elects not to exercise its option under Article 5.1.3, Option to Build, the Interconnection Customer shall so notify the Participating TO within thirty (30) Calendar Days of receipt of the Participating TO's notification that the designated dates are not acceptable to the Participating TO, and the Parties shall in good faith attempt to negotiate terms and conditions (including revision of the specified dates and liquidated damages, the provision of incentives or the procurement and construction of a portion of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades by the Interconnection Customer) pursuant to which the Participating TO is responsible for the design, procurement and construction of the Participating TO's Interconnection Facilities and Network Upgrades. If the Parties are unable to reach agreement on such terms and conditions, the Participating TO shall assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Network Upgrades pursuant to Article 5.1.1, Standard Option.

**5.2 General Conditions Applicable to Option to Build.** If the Interconnection Customer assumes responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades,

(1) the Interconnection Customer shall engineer, procure equipment, and construct the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by the Participating TO;

(2) The Interconnection Customer's engineering, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law to which the Participating TO would be subject in the engineering, procurement or construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

(3) the Participating TO shall review, and the Interconnection Customer shall obtain the Participating TO's approval of, the engineering design, equipment acceptance tests, and the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, which approval shall not be unreasonably withheld, and the CAISO may, at its option, review the engineering design, equipment acceptance tests, and the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

(4) prior to commencement of construction, the Interconnection Customer shall provide to the Participating TO, with a copy to the CAISO for informational purposes, a schedule for construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, and shall promptly respond to requests for information from the Participating TO;

(5) at any time during construction, the Participating TO shall have the right to gain unrestricted access to the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;

(6) at any time during construction, should any phase of the engineering, equipment procurement, or construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by the Participating TO, the Interconnection Customer shall be obligated to remedy deficiencies in that portion of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

(7) the Interconnection Customer shall indemnify the CAISO and Participating TO for claims arising from the Interconnection Customer's construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to Article 18.1 Indemnity;

(8) The Interconnection Customer shall transfer control of the Participating TO's Interconnection Facilities to the Participating TO and shall transfer Operational Control of Stand Alone Network Upgrades to the CAISO;

(9) Unless the Parties otherwise agree, the Interconnection Customer shall transfer ownership of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the Participating TO. As soon as reasonably practicable, but within twelve months after completion of the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, the Interconnection Customer shall provide an invoice of the final cost of the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the Participating TO, which invoice shall set forth such costs in sufficient detail to enable the Participating TO to reflect the proper costs of such facilities in its transmission rate base and to identify the investment upon which refunds will be provided;

(10) the Participating TO shall accept for operation and maintenance the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2; and

(11) The Interconnection Customer's engineering, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of the "Option to Build" conditions set forth in Appendix C. Interconnection Customer shall deliver to the Participating TO "as-built" drawings, information, and any other documents that are reasonably required by the Participating TO to assure that the Interconnection Facilities and Stand-Alone Network Upgrades are built to the standards and specifications required by the Participating TO.

**5.3 Liquidated Damages.** The actual damages to the Interconnection Customer, in the event the Participating TO's Interconnection Facilities or Network Upgrades are not completed by the dates designated by the Interconnection Customer and accepted by the Participating TO pursuant to subparagraphs 5.1.2 or 5.1.4, above, may include Interconnection Customer's fixed operation and maintenance costs and lost opportunity costs. Such actual damages are uncertain and impossible to determine at this time. Because of such uncertainty, any liquidated damages paid by the Participating TO to the Interconnection Customer in the event that the Participating TO does not complete any portion of the Participating TO's Interconnection Facilities or Network Upgrades by the applicable dates, shall be an amount equal to  $\frac{1}{2}$  of 1 percent per day of the actual cost of the Participating TO's Interconnection Facilities and Network Upgrades, in the aggregate, for which the Participating TO has assumed responsibility to design, procure and construct.

However, in no event shall the total liquidated damages exceed 20 percent of the actual cost of the Participating TO's Interconnection Facilities and Network Upgrades for which the Participating TO has assumed responsibility to design, procure, and construct. The foregoing payments will be made by the Participating TO to the Interconnection Customer as just compensation for the damages caused to the Interconnection Customer, which actual damages are uncertain and impossible to determine at this time, and as reasonable liquidated damages, but not as a penalty or a method to secure performance of this LGIA. Liquidated damages, when the Parties agree to them, are the exclusive remedy for the Participating TO's failure to meet its schedule.



No liquidated damages shall be paid to the Interconnection Customer if: (1) the Interconnection Customer is not ready to commence use of the Participating TO's Interconnection Facilities or Network Upgrades to take the delivery of power for the Electric Generating Unit's Trial Operation or to export power from the Electric Generating Unit on the specified dates, unless the Interconnection Customer would have been able to commence use of the Participating TO's Interconnection Facilities or Network Upgrades to take the delivery of power for Electric Generating Unit's Trial Operation or to export power from the Electric Generating Unit, but for the Participating TO's delay; (2) the Participating TO's failure to meet the specified dates is the result of the action or inaction of the Interconnection Customer or any other interconnection customer who has entered into an interconnection agreement with the CAISO and/or Participating TO, action or inaction by the CAISO, or any cause beyond the Participating TO's reasonable control or reasonable ability to cure; (3) the Interconnection Customer has assumed responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades; or (4) the Parties have otherwise agreed.

In no event shall the CAISO have any responsibility or liability to the Interconnection Customer for liquidated damages pursuant to the provisions of this Article 5.3.

**5.4 Power System Stabilizers.** The Interconnection Customer shall procure, install, maintain and operate Power System Stabilizers in accordance with Applicable Reliability Standards, the guidelines and procedures established by the Applicable Reliability Council, and the provisions of Section 4.6.5.1 of the CAISO Tariff. The CAISO reserves the right to establish reasonable minimum acceptable settings for any installed Power System Stabilizers, subject to the design and operating limitations of the Large Generating Facility. If the Large Generating Facility's Power System Stabilizers are removed from service or not capable of automatic operation, the Interconnection Customer shall immediately notify the CAISO and the Participating TO and restore the Power System Stabilizers to operation as soon as possible. The CAISO shall have the right to order the reduction in output or disconnection of the Large Generating Facility if the reliability of the CAISO Controlled Grid would be adversely affected as a result of improperly tuned Power System Stabilizers. The requirements of this Article 5.4 shall not apply to wind generators of the induction type.

**5.5 Equipment Procurement.** If responsibility for construction of the Participating TO's Interconnection Facilities or Network Upgrades is to be borne by the Participating TO, then the Participating TO shall commence design of the Participating TO's Interconnection Facilities or Network Upgrades and procure necessary equipment as soon as practicable after all of the following conditions are satisfied, unless the Parties otherwise agree in writing:

**5.5.1** The CAISO, in coordination with the applicable Participating TO(s), has completed the Phase II Interconnection Study pursuant to the Large Generator Interconnection Facilities Study Process Agreement;

**5.5.2** The Participating TO has received written authorization to proceed with design and procurement from the Interconnection Customer by the date specified in Appendix B, Milestones; and

**5.5.3** The Interconnection Customer has provided security to the Participating TO in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.

- 5.6 Construction Commencement.** The Participating TO shall commence construction of the Participating TO's Interconnection Facilities and Network Upgrades for which it is responsible as soon as practicable after the following additional conditions are satisfied:
- 5.6.1** Approval of the appropriate Governmental Authority has been obtained for any facilities requiring regulatory approval;
  - 5.6.2** Necessary real property rights and rights-of-way have been obtained, to the extent required for the construction of a discrete aspect of the Participating TO's Interconnection Facilities and Network Upgrades;
  - 5.6.3** The Participating TO has received written authorization to proceed with construction from the Interconnection Customer by the date specified in Appendix B, Milestones; and
  - 5.6.4** The Interconnection Customer has provided payment and security to the Participating TO in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.
- 5.7 Work Progress..** The Parties will keep each other advised periodically as to the progress of their respective design, procurement and construction efforts. Any Party may, at any time, request a progress report from another Party. If, at any time, the Interconnection Customer determines that the completion of the Participating TO's Interconnection Facilities will not be required until after the specified In-Service Date, the Interconnection Customer will provide written notice to the Participating TO and CAISO of such later date upon which the completion of the Participating TO's Interconnection Facilities will be required.
- 5.8 Information Exchange.** As soon as reasonably practicable after the Effective Date, the Parties shall exchange information regarding the design and compatibility of the Interconnection Customer's Interconnection Facilities and Participating TO's Interconnection Facilities and compatibility of the Interconnection Facilities with the Participating TO's Transmission System, and shall work diligently and in good faith to make any necessary design changes.
- 5.9 Limited Operation.** If any of the Participating TO's Interconnection Facilities or Network Upgrades are not reasonably expected to be completed prior to the Commercial Operation Date of the Electric Generating Unit, the Participating TO and/or CAISO, as applicable, shall, upon the request and at the expense of the Interconnection Customer, perform operating studies on a timely basis to determine the extent to which the Electric Generating Unit and the Interconnection Customer's Interconnection Facilities may operate prior to the completion of the Participating TO's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and this LGIA. The Participating TO and CAISO shall permit Interconnection Customer to operate the Electric Generating Unit and the Interconnection Customer's Interconnection Facilities in accordance with the results of such studies.
- 5.10 Interconnection Customer's Interconnection Facilities.** The Interconnection Customer shall, at its expense, design, procure, construct, own and install the Interconnection Customer's Interconnection Facilities, as set forth in Appendix A.

**5.10.1 Large Generating Facility and Interconnection Customer's Interconnection**

**Facilities Specifications.** In addition to the Interconnection Customer's responsibility to submit technical data with its Interconnection Request as required by Section 3.5.1 of the LGIP, the Interconnection Customer shall submit all remaining necessary specifications for the Interconnection Customer's Interconnection Facilities and Large Generating Facility, including System Protection Facilities, to the Participating TO and the CAISO at least one hundred eighty (180) Calendar Days prior to the Initial Synchronization Date; and final specifications for review and comment at least ninety (90) Calendar Days prior to the Initial Synchronization Date. The Participating TO and the CAISO shall review such specifications pursuant to this LGIA and the LGIP to ensure that the Interconnection Customer's Interconnection Facilities and Large Generating Facility are compatible with the technical specifications, operational control, safety requirements, and any other applicable requirements of the Participating TO and the CAISO and comment on such specifications within thirty (30) Calendar Days of the Interconnection Customer's submission. All specifications provided hereunder shall be deemed confidential.

**5.10.2 Participating TO's and CAISO's Review.** The Participating TO's and the CAISO's review of the Interconnection Customer's final specifications shall not be construed as confirming, endorsing, or providing a warranty as to the design, fitness, safety, durability or reliability of the Large Generating Facility, or the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall make such changes to the Interconnection Customer's Interconnection Facilities as may reasonably be required by the Participating TO or the CAISO, in accordance with Good Utility Practice, to ensure that the Interconnection Customer's Interconnection Facilities are compatible with the technical specifications, Operational Control, and safety requirements of the Participating TO or the CAISO.

**5.10.3 Interconnection Customer's Interconnection Facilities Construction.** The Interconnection Customer's Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Participating TO and Interconnection Customer agree on another mutually acceptable deadline, the Interconnection Customer shall deliver to the Participating TO and CAISO "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities and the Electric Generating Unit(s), such as: a one-line diagram, a site plan showing the Large Generating Facility and the Interconnection Customer's Interconnection Facilities, plan and elevation drawings showing the layout of the Interconnection Customer's Interconnection Facilities, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with the Interconnection Customer's step-up transformers, the facilities connecting the Large Generating Facility to the step-up transformers and the Interconnection Customer's Interconnection Facilities, and the impedances (determined by factory tests) for the associated step-up transformers and the Electric Generating Units. The Interconnection Customer shall provide the Participating TO and the CAISO specifications for the excitation system, automatic voltage regulator, Large Generating Facility control and protection settings, transformer tap settings, and communications, if applicable. Any deviations from the relay settings, machine specifications, and other specifications originally submitted by the Interconnection Customer shall be assessed by the Participating TO and the CAISO pursuant to the appropriate provisions of this LGIA and the LGIP.

**5.10.4 Interconnection Customer to Meet Requirements of the Participating TO's Interconnection Handbook.** The Interconnection Customer shall comply with the Participating TO's Interconnection Handbook.

**5.11 Participating TO's Interconnection Facilities Construction.** The Participating TO's Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Upon request, within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Participating TO and Interconnection Customer agree on another mutually acceptable deadline, the Participating TO shall deliver to the Interconnection Customer and the CAISO the following "as-built" drawings, information and documents for the Participating TO's Interconnection Facilities [include appropriate drawings and relay diagrams].

The Participating TO will obtain control for operating and maintenance purposes of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades upon completion of such facilities. Pursuant to Article 5.2, the CAISO will obtain Operational Control of the Stand Alone Network Upgrades prior to the Commercial Operation Date.

**5.12 Access Rights.** Upon reasonable notice and supervision by a Party, and subject to any required or necessary regulatory approvals, a Party ("Granting Party") shall furnish at no cost to the other Party ("Access Party") any rights of use, licenses, rights of way and easements with respect to lands owned or controlled by the Granting Party, its agents (if allowed under the applicable agency agreement), or any Affiliate, that are necessary to enable the Access Party to obtain ingress and egress to construct, operate, maintain, repair, test (or witness testing), inspect, replace or remove facilities and equipment to: (i) interconnect the Large Generating Facility with the Participating TO's Transmission System; (ii) operate and maintain the Large Generating Facility, the Interconnection Facilities and the Participating TO's Transmission System; and (iii) disconnect or remove the Access Party's facilities and equipment upon termination of this LGIA. In exercising such licenses, rights of way and easements, the Access Party shall not unreasonably disrupt or interfere with normal operation of the Granting Party's business and shall adhere to the safety rules and procedures established in advance, as may be changed from time to time, by the Granting Party and provided to the Access Party.

**5.13 Lands of Other Property Owners.** If any part of the Participating TO's Interconnection Facilities and/or Network Upgrades are to be installed on property owned by persons other than the Interconnection Customer or Participating TO, the Participating TO shall at the Interconnection Customer's expense use efforts, similar in nature and extent to those that it typically undertakes on its own behalf or on behalf of its Affiliates, including use of its eminent domain authority, and to the extent consistent with state law, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove the Participating TO's Interconnection Facilities and/or Network Upgrades upon such property.

**5.14 Permits.** Participating TO and Interconnection Customer shall cooperate with each other in good faith in obtaining all permits, licenses and authorization that are necessary to accomplish the interconnection in compliance with Applicable Laws and Regulations. With respect to this paragraph, the Participating TO shall provide permitting assistance to the Interconnection Customer comparable to that provided to the Participating TO's own, or an Affiliate's generation.

**5.15 Early Construction of Base Case Facilities.** The Interconnection Customer may request the Participating TO to construct, and the Participating TO shall construct, using Reasonable Efforts to accommodate Interconnection Customer's In-Service Date, all or any portion of any Network Upgrades required for Interconnection Customer to be interconnected to the Participating TO's Transmission System which are included in the Base Case of the Interconnection Studies for the Interconnection Customer, and which also are required to be constructed for another interconnection customer, but where such construction is not scheduled to be completed in time to achieve Interconnection Customer's In-Service Date.

**5.16 Suspension.** The Interconnection Customer reserves the right, upon written notice to the Participating TO and the CAISO, to suspend at any time all work associated with the construction and installation of the Participating TO's Interconnection Facilities, Network Upgrades, and/or Distribution Upgrades required under this LGIA, other than Network Upgrades identified in the Phase II Interconnection Study as common to multiple Generating Facilities, with the condition that the Participating TO's electrical system and the CAISO Controlled Grid shall be left in a safe and reliable condition in accordance with Good Utility Practice and the Participating TO's safety and reliability criteria and the CAISO's Applicable Reliability Standards. In such event, the Interconnection Customer shall be responsible for all reasonable and necessary costs which the Participating TO (i) has incurred pursuant to this LGIA prior to the suspension and (ii) incurs in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Participating TO's electric system during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and labor contracts which the Participating TO cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, the Participating TO shall obtain Interconnection Customer's authorization to do so.

The Participating TO shall invoice the Interconnection Customer for such costs pursuant to Article 12 and shall use due diligence to minimize its costs. In the event Interconnection Customer suspends work required under this LGIA pursuant to this Article 5.16, and has not requested the Participating TO to recommence the work or has not itself recommenced work required under this LGIA in time to ensure that the new projected Commercial Operation Date for the full Generating Facility Capacity of the Large Generating Facility is no more than three (3) years from the Commercial Operation Date identified in Appendix B hereto, this LGIA shall be deemed terminated and the Interconnection Customer's responsibility for costs will be determined in accordance with Section 2.4 of this LGIA. The suspension period shall begin on the date the suspension is requested, or the date of the written notice to the Participating TO and the CAISO, if no effective date is specified.

**5.17 Taxes.**

**5.17.1 Interconnection Customer Payments Not Taxable.** The Parties intend that all payments or property transfers made by the Interconnection Customer to the Participating TO for the installation of the Participating TO's Interconnection Facilities and the Network Upgrades shall be non-taxable, either as contributions to capital, or as a refundable advance, in accordance with the Internal Revenue Code and any applicable state income tax laws and shall not be taxable as contributions in aid of construction or otherwise under the Internal Revenue Code and any applicable state income tax laws.

**5.17.2 Representations And Covenants.** In accordance with IRS Notice 2001-82 and IRS Notice 88-129, the Interconnection Customer represents and covenants that (i) ownership of the electricity generated at the Large Generating Facility will pass to another party prior to the transmission of the electricity on the CAISO Controlled Grid, (ii) for income tax purposes, the amount of any payments and the cost of any property transferred to the Participating TO for the Participating TO's Interconnection Facilities will be capitalized by the Interconnection Customer as an intangible asset and recovered using the straight-line method over a useful life of twenty (20) years, and (iii) any portion of the Participating TO's Interconnection Facilities that is a "dual-use intertie," within the meaning of IRS Notice 88-129, is reasonably expected to carry only a de minimis amount of electricity in the direction of the Large Generating Facility. For this purpose, "de minimis amount" means no more than 5 percent of the total power flows in both directions, calculated in accordance with the "5 percent test" set forth in IRS Notice 88-129. This is not intended to be an exclusive list of the relevant conditions that must be met to conform to IRS requirements for non-taxable treatment.

At the Participating TO's request, the Interconnection Customer shall provide the Participating TO with a report from an independent engineer confirming its representation in clause (iii), above. The Participating TO represents and covenants that the cost of the Participating TO's Interconnection Facilities paid for by the Interconnection Customer without the possibility of refund or credit will have no net effect on the base upon which rates are determined.

**5.17.3 Indemnification for the Cost Consequence of Current Tax Liability Imposed Upon the Participating TO.** Notwithstanding Article 5.17.1, the Interconnection Customer shall protect, indemnify and hold harmless the Participating TO from the cost consequences of any current tax liability imposed against the Participating TO as the result of payments or property transfers made by the Interconnection Customer to the Participating TO under this LGIA for Interconnection Facilities, as well as any interest and penalties, other than interest and penalties attributable to any delay caused by the Participating TO.

The Participating TO shall not include a gross-up for the cost consequences of any current tax liability in the amounts it charges the Interconnection Customer under this LGIA unless (i) the Participating TO has determined, in good faith, that the payments or property transfers made by the Interconnection Customer to the Participating TO should be reported as income subject to taxation or (ii) any Governmental Authority directs the Participating TO to report payments or property as income subject to taxation; provided, however, that the Participating TO may require the Interconnection Customer to provide security for Interconnection Facilities, in a form reasonably acceptable to the Participating TO (such as a parental guarantee or a letter of credit), in an amount equal to the cost consequences of any current tax liability under this Article 5.17. The Interconnection Customer shall reimburse the Participating TO for such costs on a fully grossed-up basis, in accordance with Article 5.17.4, within thirty (30) Calendar Days of receiving written notification from the Participating TO of the amount due, including detail about how the amount was calculated.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten year testing period and the applicable statute of limitation, as it may be extended by the Participating TO upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event and the payment of any related indemnification obligations as contemplated by this Article 5.17.

**5.17.4 Tax Gross-Up Amount.** The Interconnection Customer's liability for the cost consequences of any current tax liability under this Article 5.17 shall be calculated on a fully grossed-up basis. Except as may otherwise be agreed to by the parties, this means that the Interconnection Customer will pay the Participating TO, in addition to the amount paid for the Interconnection Facilities and Network Upgrades, an amount equal to (1) the current taxes imposed on the Participating TO ("Current Taxes") on the excess of (a) the gross income realized by the Participating TO as a result of payments or property transfers made by the Interconnection Customer to the Participating TO under this LGIA (without regard to any payments under this Article 5.17) (the "Gross Income Amount") over (b) the present value of future tax deductions for depreciation that will be available as a result of such payments or property transfers (the "Present Value Depreciation Amount"), plus (2) an additional amount sufficient to permit the Participating TO to receive and retain, after the payment of all Current Taxes, an amount equal to the net amount described in clause (1).

For this purpose, (i) Current Taxes shall be computed based on the Participating TO's composite federal and state tax rates at the time the payments or property transfers are received and the Participating TO will be treated as being subject to tax at the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting the Participating TO's anticipated tax depreciation deductions as a result of such payments or property transfers by the Participating TO's current weighted average cost of capital. Thus, the formula for calculating the Interconnection Customer's liability to the Participating TO pursuant to this Article 5.17.4 can be expressed as follows:  $(\text{Current Tax Rate} \times (\text{Gross Income Amount} - \text{Present Value of Tax Depreciation})) / (1 - \text{Current Tax Rate})$ . Interconnection Customer's estimated tax liability in the event taxes are imposed shall be stated in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades.

**5.17.5 Private Letter Ruling or Change or Clarification of Law.** At the Interconnection Customer's request and expense, the Participating TO shall file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by the Interconnection Customer to the Participating TO under this LGIA are subject to federal income taxation. The Interconnection Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of the Interconnection Customer's knowledge. The Participating TO and Interconnection Customer shall cooperate in good faith with respect to the submission of such request, provided, however, the Interconnection Customer and the Participating TO explicitly acknowledge (and nothing herein is intended to alter) Participating TO's obligation under law to certify that the facts presented in the ruling request are true, correct and complete.

The Participating TO shall keep the Interconnection Customer fully informed of the status of such request for a private letter ruling and shall execute either a privacy act waiver or a limited power of attorney, in a form acceptable to the IRS, that authorizes the Interconnection Customer to participate in all discussions with the IRS regarding such request for a private letter ruling. The Participating TO shall allow the Interconnection Customer to attend all meetings with IRS officials about the request and shall permit the Interconnection Customer to prepare the initial drafts of any follow-up letters in connection with the request.

- 5.17.6 Subsequent Taxable Events.** If, within 10 years from the date on which the relevant Participating TO's Interconnection Facilities are placed in service, (i) the Interconnection Customer Breaches the covenants contained in Article 5.17.2, (ii) a "disqualification event" occurs within the meaning of IRS Notice 88-129, or (iii) this LGIA terminates and the Participating TO retains ownership of the Interconnection Facilities and Network Upgrades, the Interconnection Customer shall pay a tax gross-up for the cost consequences of any current tax liability imposed on the Participating TO, calculated using the methodology described in Article 5.17.4 and in accordance with IRS Notice 90-60.
- 5.17.7 Contests.** In the event any Governmental Authority determines that the Participating TO's receipt of payments or property constitutes income that is subject to taxation, the Participating TO shall notify the Interconnection Customer, in writing, within thirty (30) Calendar Days of receiving notification of such determination by a Governmental Authority. Upon the timely written request by the Interconnection Customer and at the Interconnection Customer's sole expense, the Participating TO may appeal, protest, seek abatement of, or otherwise oppose such determination. Upon the Interconnection Customer's written request and sole expense, the Participating TO may file a claim for refund with respect to any taxes paid under this Article 5.17, whether or not it has received such a determination. The Participating TO reserve the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the selection of counsel and compromise or settlement of the claim, but the Participating TO shall keep the Interconnection Customer informed, shall consider in good faith suggestions from the Interconnection Customer about the conduct of the contest, and shall reasonably permit the Interconnection Customer or an Interconnection Customer representative to attend contest proceedings.

The Interconnection Customer shall pay to the Participating TO on a periodic basis, as invoiced by the Participating TO, the Participating TO's documented reasonable costs of prosecuting such appeal, protest, abatement or other contest, including any costs associated with obtaining the opinion of independent tax counsel described in this Article 5.17.7. The Participating TO may abandon any contest if the Interconnection Customer fails to provide payment to the Participating TO within thirty (30) Calendar Days of receiving such invoice.

At any time during the contest, the Participating TO may agree to a settlement either with the Interconnection Customer's consent or, if such consent is refused, after obtaining written advice from independent nationally-recognized tax counsel, selected by the Participating TO, but reasonably acceptable to the Interconnection Customer, that the proposed settlement represents a reasonable settlement given the hazards of litigation.



The Interconnection Customer's obligation shall be based on the amount of the settlement agreed to by the Interconnection Customer, or if a higher amount, so much of the settlement that is supported by the written advice from nationally-recognized tax counsel selected under the terms of the preceding paragraph. The settlement amount shall be calculated on a fully grossed-up basis to cover any related cost consequences of the current tax liability. The Participating TO may also settle any tax controversy without receiving the Interconnection Customer's consent or any such written advice; however, any such settlement will relieve the Interconnection Customer from any obligation to indemnify the Participating TO for the tax at issue in the contest (unless the failure to obtain written advice is attributable to the Interconnection Customer's unreasonable refusal to the appointment of independent tax counsel).

**5.17.8 Refund.** In the event that (a) a private letter ruling is issued to the Participating TO which holds that any amount paid or the value of any property transferred by the Interconnection Customer to the Participating TO under the terms of this LGIA is not subject to federal income taxation, (b) any legislative change or administrative announcement, notice, ruling or other determination makes it reasonably clear to the Participating TO in good faith that any amount paid or the value of any property transferred by the Interconnection Customer to the Participating TO under the terms of this LGIA is not taxable to the Participating TO, (c) any abatement, appeal, protest, or other contest results in a determination that any payments or transfers made by the Interconnection Customer to the Participating TO are not subject to federal income tax, or (d) if the Participating TO receives a refund from any taxing authority for any overpayment of tax attributable to any payment or property transfer made by the Interconnection Customer to the Participating TO pursuant to this LGIA, the Participating TO shall promptly refund to the Interconnection Customer the following:

(i) any payment made by Interconnection Customer under this Article 5.17 for taxes that is attributable to the amount determined to be non-taxable, together with interest thereon,

(ii) interest on any amounts paid by the Interconnection Customer to the Participating TO for such taxes which the Participating TO did not submit to the taxing authority, calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date payment was made by the Interconnection Customer to the date the Participating TO refunds such payment to the Interconnection Customer, and

(iii) with respect to any such taxes paid by the Participating TO, any refund or credit the Participating TO receives or to which it may be entitled from any Governmental Authority, interest (or that portion thereof attributable to the payment described in clause (i), above) owed to the Participating TO for such overpayment of taxes (including any reduction in interest otherwise payable by the Participating TO to any Governmental Authority resulting from an offset or credit); provided, however, that the Participating TO will remit such amount promptly to the Interconnection Customer only after and to the extent that the Participating TO has received a tax refund, credit or offset from any Governmental Authority for any applicable overpayment of income tax related to the Participating TO's Interconnection Facilities.

The intent of this provision is to leave the Parties, to the extent practicable, in the event that no taxes are due with respect to any payment for Interconnection Facilities and Network Upgrades hereunder, in the same position they would have been in had no such tax payments been made.

**5.17.9 Taxes Other Than Income Taxes.** Upon the timely request by the Interconnection Customer, and at the Interconnection Customer's sole expense, the CAISO or Participating TO may appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against the CAISO or Participating TO for which the Interconnection Customer may be required to reimburse the CAISO or Participating TO under the terms of this LGIA. The Interconnection Customer shall pay to the Participating TO on a periodic basis, as invoiced by the Participating TO, the Participating TO's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. The Interconnection Customer, the CAISO, and the Participating TO shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by the Interconnection Customer to the CAISO or Participating TO for such taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, the Interconnection Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by the Participating TO.

**5.18 Tax Status.** Each Party shall cooperate with the others to maintain the other Parties' tax status. Nothing in this LGIA is intended to adversely affect the CAISO's or any Participating TO's tax exempt status with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds.

**5.19 Modification.**

**5.19.1 General.** The Interconnection Customer or the Participating TO may undertake modifications to its facilities, subject to the provisions of this LGIA and the CAISO Tariff. If a Party plans to undertake a modification that reasonably may be expected to affect the other Parties' facilities, that Party shall provide to the other Parties sufficient information regarding such modification so that the other Parties may evaluate the potential impact of such modification prior to commencement of the work. Such information shall be deemed to be confidential hereunder and shall include information concerning the timing of such modifications and whether such modifications are expected to interrupt the flow of electricity from the Large Generating Facility. The Party desiring to perform such work shall provide the relevant drawings, plans, and specifications to the other Parties at least ninety (90) Calendar Days in advance of the commencement of the work or such shorter period upon which the Parties may agree, which agreement shall not unreasonably be withheld, conditioned or delayed.

In the case of Large Generating Facility modifications that do not require the Interconnection Customer to submit an Interconnection Request, the CAISO or Participating TO shall provide, within thirty (30) Calendar Days (or such other time as the Parties may agree), an estimate of any additional modifications to the CAISO Controlled Grid, Participating TO's Interconnection Facilities, Network Upgrades or Distribution Upgrades necessitated by such Interconnection Customer modification and a good faith estimate of the costs thereof. The Participating TO and the CAISO shall determine if a Large Generating Facility modification is a Material Modification in accordance with the LGIP.

**5.19.2 Standards.** Any additions, modifications, or replacements made to a Party's facilities shall be designed, constructed and operated in accordance with this LGIA and Good Utility Practice.

**5.19.3 Modification Costs.** The Interconnection Customer shall not be directly assigned the costs of any additions, modifications, or replacements that the Participating TO makes to the Participating TO's Interconnection Facilities or the Participating TO's Transmission System to facilitate the interconnection of a third party to the Participating TO's Interconnection Facilities or the Participating TO's Transmission System, or to provide transmission service to a third party under the CAISO Tariff. The Interconnection Customer shall be responsible for the costs of any additions, modifications, or replacements to the Interconnection Facilities that may be necessary to maintain or upgrade such Interconnection Facilities consistent with Applicable Laws and Regulations, Applicable Reliability Standards or Good Utility Practice.

## ARTICLE 6. TESTING AND INSPECTION

**6.1 Pre-Commercial Operation Date Testing and Modifications.** Prior to the Commercial Operation Date, the Participating TO shall test the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades and the Interconnection Customer shall test the Large Generating Facility and the Interconnection Customer's Interconnection Facilities to ensure their safe and reliable operation. Similar testing may be required after initial operation. Each Party shall make any modifications to its facilities that are found to be necessary as a result of such testing. The Interconnection Customer shall bear the cost of all such testing and modifications. The Interconnection Customer shall not commence initial parallel operation of an Electric Generating Unit with the Participating TO's Transmission System until the Participating TO provides prior written approval, which approval shall not be unreasonably withheld, for operation of such Electric Generating Unit. The Interconnection Customer shall generate test energy at the Large Generating Facility only if it has arranged for the delivery of such test energy.

**6.2 Post-Commercial Operation Date Testing and Modifications.** Each Party shall at its own expense perform routine inspection and testing of its facilities and equipment in accordance with Good Utility Practice as may be necessary to ensure the continued interconnection of the Large Generating Facility with the Participating TO's Transmission System in a safe and reliable manner. Each Party shall have the right, upon advance written notice, to require reasonable additional testing of the other Party's facilities, at the requesting Party's expense, as may be in accordance with Good Utility Practice.

- 6.3 Right to Observe Testing.** Each Party shall notify the other Parties at least fourteen (14) Calendar Days in advance of its performance of tests of its Interconnection Facilities or Generating Facility. The other Parties have the right, at their own expense, to observe such testing.
- 6.4 Right to Inspect.** Each Party shall have the right, but shall have no obligation to: (i) observe another Party's tests and/or inspection of any of its System Protection Facilities and other protective equipment, including Power System Stabilizers; (ii) review the settings of another Party's System Protection Facilities and other protective equipment; and (iii) review another Party's maintenance records relative to the Interconnection Facilities, the System Protection Facilities and other protective equipment. A Party may exercise these rights from time to time as it deems necessary upon reasonable notice to the other Party. The exercise or non-exercise by a Party of any such rights shall not be construed as an endorsement or confirmation of any element or condition of the Interconnection Facilities or the System Protection Facilities or other protective equipment or the operation thereof, or as a warranty as to the fitness, safety, desirability, or reliability of same. Any information that a Party obtains through the exercise of any of its rights under this Article 6.4 shall be deemed to be Confidential Information and treated pursuant to Article 22 of this LGIA.

## ARTICLE 7. METERING

- 7.1 General.** Each Party shall comply with any Applicable Reliability Standards and the Applicable Reliability Council requirements. The Interconnection Customer and CAISO shall comply with the provisions of the CAISO Tariff regarding metering, including Section 10 and the Metering Protocol of the CAISO Tariff. Unless otherwise agreed by the Participating TO and the Interconnection Customer, the Participating TO may install additional Metering Equipment at the Point of Interconnection prior to any operation of any Electric Generating Unit and shall own, operate, test and maintain such Metering Equipment. Power flows to and from the Large Generating Facility shall be measured at or, at the CAISO's or Participating TO's option for its respective Metering Equipment, compensated to, the Point of Interconnection. The CAISO shall provide metering quantities to the Interconnection Customer upon request in accordance with the CAISO Tariff by directly polling the CAISO's meter data acquisition system. The Interconnection Customer shall bear all reasonable documented costs associated with the purchase, installation, operation, testing and maintenance of the Metering Equipment.
- 7.2 Check Meters.** The Interconnection Customer, at its option and expense, may install and operate, on its premises and on its side of the Point of Interconnection, one or more check meters to check the CAISO-pollled meters or the Participating TO's meters. Such check meters shall be for check purposes only and shall not be used for the measurement of power flows for purposes of this LGIA, except in the case that no other means are available on a temporary basis at the option of the CAISO or the Participating TO. The check meters shall be subject at all reasonable times to inspection and examination by the CAISO or Participating TO or their designees. The installation, operation and maintenance thereof shall be performed entirely by the Interconnection Customer in accordance with Good Utility Practice.
- 7.3 Participating TO Retail Metering.** The Participating TO may install retail revenue quality meters and associated equipment, pursuant to the Participating TO's applicable retail tariffs.

## ARTICLE 8. COMMUNICATIONS

- 8.1 Interconnection Customer Obligations.** The Interconnection Customer shall maintain satisfactory operating communications with the CAISO in accordance with the provisions of the CAISO Tariff and with the Participating TO's dispatcher or representative designated by the Participating TO. The Interconnection Customer shall provide standard voice line, dedicated voice line and facsimile communications at its Large Generating Facility control room or central dispatch facility through use of either the public telephone system, or a voice communications system that does not rely on the public telephone system. The Interconnection Customer shall also provide the dedicated data circuit(s) necessary to provide Interconnection Customer data to the CAISO and Participating TO as set forth in Appendix D, Security Arrangements Details. The data circuit(s) shall extend from the Large Generating Facility to the location(s) specified by the CAISO and Participating TO. Any required maintenance of such communications equipment shall be performed by the Interconnection Customer. Operational communications shall be activated and maintained under, but not be limited to, the following events: system paralleling or separation, scheduled and unscheduled shutdowns, equipment clearances, and hourly and daily load data.
- 8.2 Remote Terminal Unit.** Prior to the Initial Synchronization Date of each Electric Generating Unit, a Remote Terminal Unit, or equivalent data collection and transfer equipment acceptable to the Parties, shall be installed by the Interconnection Customer, or by the Participating TO at the Interconnection Customer's expense, to gather accumulated and instantaneous data to be telemetered to the location(s) designated by the CAISO and by the Participating TO through use of a dedicated point-to-point data circuit(s) as indicated in Article 8.1.
- Telemetry to the CAISO shall be provided in accordance with the CAISO's technical standards for direct telemetry. For telemetry to the Participating TO, the communication protocol for the data circuit(s) shall be specified by the Participating TO. Instantaneous bi-directional real power and reactive power flow and any other required information must be telemetered directly to the location(s) specified by the Participating TO.
- Each Party will promptly advise the other Parties if it detects or otherwise learns of any metering, telemetry or communications equipment errors or malfunctions that require the attention and/or correction by another Party. The Party owning such equipment shall correct such error or malfunction as soon as reasonably feasible.
- 8.3 No Annexation.** Any and all equipment placed on the premises of a Party shall be and remain the property of the Party providing such equipment regardless of the mode and manner of annexation or attachment to real property, unless otherwise mutually agreed by the Parties.

## ARTICLE 9. OPERATIONS

- 9.1 General.** Each Party shall comply with Applicable Reliability Standards and the Applicable Reliability Council requirements. Each Party shall provide to the other Party all information that may reasonably be required by the other Party to comply with Applicable Laws and Regulations and Applicable Reliability Standards.

- 9.2 Balancing Authority Area Notification.** At least three months before Initial Synchronization Date, the Interconnection Customer shall notify the CAISO and Participating TO in writing of the Balancing Authority Area in which the Large Generating Facility intends to be located. If the Interconnection Customer intends to locate the Large Generating Facility in a Balancing Authority Area other than the Balancing Authority Area within whose electrically metered boundaries the Large Generating Facility is located, and if permitted to do so by the relevant transmission tariffs, all necessary arrangements, including but not limited to those set forth in Article 7 and Article 8 of this LGIA, and remote Balancing Authority Area generator interchange agreements, if applicable, and the appropriate measures under such agreements, shall be executed and implemented prior to the placement of the Large Generating Facility in the other Balancing Authority Area.
- 9.3 CAISO and Participating TO Obligations.** The CAISO and Participating TO shall cause the Participating TO's Transmission System to be operated and controlled in a safe and reliable manner and in accordance with this LGIA. The Participating TO at the Interconnection Customer's expense shall cause the Participating TO's Interconnection Facilities to be operated, maintained and controlled in a safe and reliable manner and in accordance with this LGIA. The CAISO and Participating TO may provide operating instructions to the Interconnection Customer consistent with this LGIA and Participating TO and CAISO operating protocols and procedures as they may change from time to time. The Participating TO and CAISO will consider changes to their operating protocols and procedures proposed by the Interconnection Customer.
- 9.4 Interconnection Customer Obligations.** The Interconnection Customer shall at its own expense operate, maintain and control the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA. The Interconnection Customer shall operate the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in accordance with all applicable requirements of the Balancing Authority Area of which it is part, including such requirements as set forth in Appendix C, Interconnection Details, of this LGIA. Appendix C, Interconnection Details, will be modified to reflect changes to the requirements as they may change from time to time. A Party may request that another Party provide copies of the requirements set forth in Appendix C, Interconnection Details, of this LGIA. The Interconnection Customer shall not commence Commercial Operation of an Electric Generating Unit with the Participating TO's Transmission System until the Participating TO provides prior written approval, which approval shall not be unreasonably withheld, for operation of such Electric Generating Unit.
- 9.5 Start-Up and Synchronization.** Consistent with the Parties' mutually acceptable procedures, the Interconnection Customer is responsible for the proper synchronization of each Electric Generating Unit to the CAISO Controlled Grid.
- 9.6 Reactive Power.**
- 9.6.1 Power Factor Design Criteria.** The Interconnection Customer shall design the Large Generating Facility to maintain a composite power delivery at continuous rated power output at the terminals of the Electric Generating Unit at a power factor within the range of 0.95 leading to 0.90 lagging, unless the CAISO has established different requirements that apply to all generators in the Balancing Authority Area on a comparable basis. Power factor design criteria for wind generators are provided in Appendix H of this LGIA.

**9.6.2 Voltage Schedules.** Once the Interconnection Customer has synchronized an Electric Generating Unit with the CAISO Controlled Grid, the CAISO or Participating TO shall require the Interconnection Customer to maintain a voltage schedule by operating the Electric Generating Unit to produce or absorb reactive power within the design limitations of the Electric Generating Unit set forth in Article 9.6.1 (Power Factor Design Criteria). CAISO's voltage schedules shall treat all sources of reactive power in the Balancing Authority Area in an equitable and not unduly discriminatory manner. The Participating TO shall exercise Reasonable Efforts to provide the Interconnection Customer with such schedules at least one (1) day in advance, and the CAISO or Participating TO may make changes to such schedules as necessary to maintain the reliability of the CAISO Controlled Grid or the Participating TO's electric system. The Interconnection Customer shall operate the Electric Generating Unit to maintain the specified output voltage or power factor within the design limitations of the Electric Generating Unit set forth in Article 9.6.1 (Power Factor Design Criteria), and as may be required by the CAISO to operate the Electric Generating Unit at a specific voltage schedule within the design limitations set forth in Article 9.6.1. If the Interconnection Customer is unable to maintain the specified voltage or power factor, it shall promptly notify the CAISO and the Participating TO.

**9.6.2.1 Governors and Regulators.** Whenever an Electric Generating Unit is operated in parallel with the CAISO Controlled Grid and the speed governors (if installed on the Electric Generating Unit pursuant to Good Utility Practice) and voltage regulators are capable of operation, the Interconnection Customer shall operate the Electric Generating Unit with its speed governors and voltage regulators in automatic operation. If the Electric Generating Unit's speed governors and voltage regulators are not capable of such automatic operation, the Interconnection Customer shall immediately notify the CAISO and the Participating TO and ensure that the Electric Generating Unit operates as specified in Article 9.6.2 through manual operation and that such Electric Generating Unit's reactive power production or absorption (measured in MVARs) are within the design capability of the Electric Generating Unit(s) and steady state stability limits. The Interconnection Customer shall restore the speed governors and voltage regulators to automatic operation as soon as possible. If the Large Generating Facility's speed governors and voltage regulators are improperly tuned or malfunctioning, the CAISO shall have the right to order the reduction in output or disconnection of the Large Generating Facility if the reliability of the CAISO Controlled Grid would be adversely affected. The Interconnection Customer shall not cause its Large Generating Facility to disconnect automatically or instantaneously from the CAISO Controlled Grid or trip any Electric Generating Unit comprising the Large Generating Facility for an under or over frequency condition unless the abnormal frequency condition persists for a time period beyond the limits set forth in ANSI/IEEE Standard C37.106, or such other standard as applied to other generators in the Balancing Authority Area on a comparable basis.

**9.6.3 Payment for Reactive Power.** CAISO is required to pay the Interconnection Customer for reactive power that Interconnection Customer provides or absorbs from an Electric Generating Unit when the CAISO requests the Interconnection Customer to operate its Electric Generating Unit outside the range specified in Article 9.6.1, provided that if the CAISO pays other generators for reactive power service within the specified range, it must also pay the Interconnection Customer. Payments shall be pursuant to Article 11.6 or such other agreement to which the CAISO and Interconnection Customer have otherwise agreed.

**9.7 Outages and Interruptions.**

**9.7.1 Outages.**

**9.7.1.1 Outage Authority and Coordination.** Each Party may in accordance with Good Utility Practice in coordination with the other Parties remove from service any of its respective Interconnection Facilities or Network Upgrades that may impact another Party's facilities as necessary to perform maintenance or testing or to install or replace equipment. Absent an Emergency Condition, the Party scheduling a removal of such facility(ies) from service will use Reasonable Efforts to schedule such removal on a date and time mutually acceptable to all Parties. In all circumstances any Party planning to remove such facility(ies) from service shall use Reasonable Efforts to minimize the effect on the other Parties of such removal.

**9.7.1.2 Outage Schedules.** The CAISO shall post scheduled outages of CAISO Controlled Grid facilities in accordance with the provisions of the CAISO Tariff. The Interconnection Customer shall submit its planned maintenance schedules for the Large Generating Facility to the CAISO in accordance with the CAISO Tariff. The Interconnection Customer shall update its planned maintenance schedules in accordance with the CAISO Tariff. The CAISO may request the Interconnection Customer to reschedule its maintenance as necessary to maintain the reliability of the CAISO Controlled Grid in accordance with the CAISO Tariff. Such planned maintenance schedules and updates and changes to such schedules shall be provided by the Interconnection Customer to the Participating TO concurrently with their submittal to the CAISO. The CAISO shall compensate the Interconnection Customer for any additional direct costs that the Interconnection Customer incurs as a result of having to reschedule maintenance in accordance with the CAISO Tariff. The Interconnection Customer will not be eligible to receive compensation, if during the twelve (12) months prior to the date of the scheduled maintenance, the Interconnection Customer had modified its schedule of maintenance activities.



**9.7.1.3 Outage Restoration.** If an outage on a Party's Interconnection Facilities or Network Upgrades adversely affects another Party's operations or facilities, the Party that owns or controls the facility that is out of service shall use Reasonable Efforts to promptly restore such facility(ies) to a normal operating condition consistent with the nature of the outage. The Party that owns or controls the facility that is out of service shall provide the other Parties, to the extent such information is known, information on the nature of the Emergency Condition, if the outage is caused by an Emergency Condition, an estimated time of restoration, and any corrective actions required. Initial verbal notice shall be followed up as soon as practicable with written notice explaining the nature of the outage, if requested by a Party, which may be provided by e-mail or facsimile.

**9.7.2 Interruption of Service.** If required by Good Utility Practice to do so, the CAISO or the Participating TO may require the Interconnection Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect the CAISO's or the Participating TO's ability to perform such activities as are necessary to safely and reliably operate and maintain the Participating TO's electric system or the CAISO Controlled Grid. The following provisions shall apply to any interruption or reduction permitted under this Article 9.7.2:

**9.7.2.1** The interruption or reduction shall continue only for so long as reasonably necessary under Good Utility Practice;

**9.7.2.2** Any such interruption or reduction shall be made on an equitable, non-discriminatory basis with respect to all generating facilities directly connected to the CAISO Controlled Grid, subject to any conditions specified in this LGIA;

**9.7.2.3** When the interruption or reduction must be made under circumstances which do not allow for advance notice, the CAISO or Participating TO, as applicable, shall notify the Interconnection Customer by telephone as soon as practicable of the reasons for the curtailment, interruption, or reduction, and, if known, its expected duration. Telephone notification shall be followed by written notification, if requested by the Interconnection Customer, as soon as practicable;

**9.7.2.4** Except during the existence of an Emergency Condition, the CAISO or Participating TO shall notify the Interconnection Customer in advance regarding the timing of such interruption or reduction and further notify the Interconnection Customer of the expected duration. The CAISO or Participating TO shall coordinate with the Interconnection Customer using Good Utility Practice to schedule the interruption or reduction during periods of least impact to the Interconnection Customer, the CAISO, and the Participating TO;

**9.7.2.5** The Parties shall cooperate and coordinate with each other to the extent necessary in order to restore the Large Generating Facility, Interconnection Facilities, the Participating TO's Transmission System, and the CAISO Controlled Grid to their normal operating state, consistent with system conditions and Good Utility Practice.

**9.7.3 Under-Frequency and Over Frequency Conditions.** The CAISO Controlled Grid is designed to automatically activate a load-shed program as required by Applicable Reliability Standards and the Applicable Reliability Council in the event of an under-frequency system disturbance. The Interconnection Customer shall implement under-frequency and over-frequency protection set points for the Large Generating Facility as required by Applicable Reliability Standards and the Applicable Reliability Council to ensure "ride through" capability. Large Generating Facility response to frequency deviations of pre-determined magnitudes, both under-frequency and over-frequency deviations, shall be studied and coordinated with the Participating TO and CAISO in accordance with Good Utility Practice. The term "ride through" as used herein shall mean the ability of a Generating Facility to stay connected to and synchronized with the CAISO Controlled Grid during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice.

**9.7.4 System Protection and Other Control Requirements.**

**9.7.4.1 System Protection Facilities.** The Interconnection Customer shall, at its expense, install, operate and maintain System Protection Facilities as a part of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. The Participating TO shall install at the Interconnection Customer's expense any System Protection Facilities that may be required on the Participating TO's Interconnection Facilities or the Participating TO's Transmission System as a result of the interconnection of the Large Generating Facility and the Interconnection Customer's Interconnection Facilities.

**9.7.4.2** The Participating TO's and Interconnection Customer's protection facilities shall be designed and coordinated with other systems in accordance with Applicable Reliability Standards, Applicable Reliability Council criteria, and Good Utility Practice.

**9.7.4.3** The Participating TO and Interconnection Customer shall each be responsible for protection of its facilities consistent with Good Utility Practice.

**9.7.4.4** The Participating TO's and Interconnection Customer's protective relay design shall incorporate the necessary test switches to perform the tests required in Article 6. The required test switches will be placed such that they allow operation of lockout relays while preventing breaker failure schemes from operating and causing unnecessary breaker operations and/or the tripping of the Interconnection Customer's Electric Generating Units.

**9.7.4.5** The Participating TO and Interconnection Customer will test, operate and maintain System Protection Facilities in accordance with Good Utility Practice and, if applicable, the requirements of the Participating TO's Interconnection Handbook.

- 9.7.4.6** Prior to the in-service date, and again prior to the Commercial Operation Date, the Participating TO and Interconnection Customer or their agents shall perform a complete calibration test and functional trip test of the System Protection Facilities. At intervals suggested by Good Utility Practice, the standards and procedures of the Participating TO, including, if applicable, the requirements of the Participating TO's Interconnection Handbook, and following any apparent malfunction of the System Protection Facilities, each Party shall perform both calibration and functional trip tests of its System Protection Facilities. These tests do not require the tripping of any in-service generation unit. These tests do, however, require that all protective relays and lockout contacts be activated.
- 9.7.5 Requirements for Protection.** In compliance with Good Utility Practice and, if applicable, the requirements of the Participating TO's Interconnection Handbook, the Interconnection Customer shall provide, install, own, and maintain relays, circuit breakers and all other devices necessary to remove any fault contribution of the Large Generating Facility to any short circuit occurring on the Participating TO's Transmission System not otherwise isolated by the Participating TO's equipment, such that the removal of the fault contribution shall be coordinated with the protective requirements of the Participating TO's Transmission System. Such protective equipment shall include, without limitation, a disconnecting device with fault current-interrupting capability located between the Large Generating Facility and the Participating TO's Transmission System at a site selected upon mutual agreement (not to be unreasonably withheld, conditioned or delayed) of the Parties. The Interconnection Customer shall be responsible for protection of the Large Generating Facility and the Interconnection Customer's other equipment from such conditions as negative sequence currents, over- or under-frequency, sudden load rejection, over- or under-voltage, and generator loss-of-field. The Interconnection Customer shall be solely responsible to disconnect the Large Generating Facility and the Interconnection Customer's other equipment if conditions on the CAISO Controlled Grid could adversely affect the Large Generating Facility.
- 9.7.6 Power Quality.** Neither the Participating TO's nor the Interconnection Customer's facilities shall cause excessive voltage flicker nor introduce excessive distortion to the sinusoidal voltage or current waves as defined by ANSI Standard C84.1-1989, in accordance with IEEE Standard 519, any applicable superseding electric industry standard, or any alternative Applicable Reliability Standard or Applicable Reliability Council standard. In the event of a conflict among ANSI Standard C84.1-1989, any applicable superseding electric industry standard, or any alternative Applicable Reliability Standard or Applicable Reliability Council standard, the alternative Applicable Reliability Standard or Applicable Reliability Council standard shall control.
- 9.8 Switching and Tagging Rules.** Each Party shall provide the other Parties a copy of its switching and tagging rules that are applicable to the other Parties' activities. Such switching and tagging rules shall be developed on a non-discriminatory basis. The Parties shall comply with applicable switching and tagging rules, as amended from time to time, in obtaining clearances for work or for switching operations on equipment.

**9.9 Use of Interconnection Facilities by Third Parties.**

**9.9.1 Purpose of Interconnection Facilities.** Except as may be required by Applicable Laws and Regulations, or as otherwise agreed to among the Parties, the Interconnection Facilities shall be constructed for the sole purpose of interconnecting the Large Generating Facility to the Participating TO's Transmission System and shall be used for no other purpose.

**9.9.2 Third Party Users.** If required by Applicable Laws and Regulations or if the Parties mutually agree, such agreement not to be unreasonably withheld, to allow one or more third parties to use the Participating TO's Interconnection Facilities, or any part thereof, the Interconnection Customer will be entitled to compensation for the capital expenses it incurred in connection with the Interconnection Facilities based upon the pro rata use of the Interconnection Facilities by the Participating TO, all third party users, and the Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually-agreed upon methodology. In addition, cost responsibility for ongoing costs, including operation and maintenance costs associated with the Interconnection Facilities, will be allocated between the Interconnection Customer and any third party users based upon the pro rata use of the Interconnection Facilities by the Participating TO, all third party users, and the Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually agreed upon methodology. If the issue of such compensation or allocation cannot be resolved through such negotiations, it shall be submitted to FERC for resolution.

**9.10 Disturbance Analysis Data Exchange.** The Parties will cooperate with one another in the analysis of disturbances to either the Large Generating Facility or the CAISO Controlled Grid by gathering and providing access to any information relating to any disturbance, including information from oscillography, protective relay targets, breaker operations and sequence of events records, and any disturbance information required by Good Utility Practice.

**ARTICLE 10. MAINTENANCE**

**10.1 Participating TO Obligations.** The Participating TO shall maintain the Participating TO's Transmission System and the Participating TO's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA.

**10.2 Interconnection Customer Obligations.** The Interconnection Customer shall maintain the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA.

**10.3 Coordination.** The Parties shall confer regularly to coordinate the planning, scheduling and performance of preventive and corrective maintenance on the Large Generating Facility and the Interconnection Facilities.

- 10.4 Secondary Systems.** The Participating TO and Interconnection Customer shall cooperate with the other Parties in the inspection, maintenance, and testing of control or power circuits that operate below 600 volts, AC or DC, including, but not limited to, any hardware, control or protective devices, cables, conductors, electric raceways, secondary equipment panels, transducers, batteries, chargers, and voltage and current transformers that directly affect the operation of a Party's facilities and equipment which may reasonably be expected to impact the other Parties. Each Party shall provide advance notice to the other Parties before undertaking any work on such circuits, especially on electrical circuits involving circuit breaker trip and close contacts, current transformers, or potential transformers.
- 10.5 Operating and Maintenance Expenses.** Subject to the provisions herein addressing the use of facilities by others, and except for operations and maintenance expenses associated with modifications made for providing interconnection or transmission service to a third party and such third party pays for such expenses, the Interconnection Customer shall be responsible for all reasonable expenses including overheads, associated with: (1) owning, operating, maintaining, repairing, and replacing the Interconnection Customer's Interconnection Facilities; and (2) operation, maintenance, repair and replacement of the Participating TO's Interconnection Facilities.

#### ARTICLE 11. PERFORMANCE OBLIGATION

- 11.1 Interconnection Customer's Interconnection Facilities.** The Interconnection Customer shall design, procure, construct, install, own and/or control the Interconnection Customer's Interconnection Facilities described in Appendix A at its sole expense.
- 11.2 Participating TO's Interconnection Facilities.** The Participating TO shall design, procure, construct, install, own and/or control the Participating TO's Interconnection Facilities described in Appendix A at the sole expense of the Interconnection Customer. Unless the Participating TO elects to fund the capital for the Participating TO's Interconnection Facilities, they shall be solely funded by the Interconnection Customer.
- 11.3 Network Upgrades and Distribution Upgrades.** The Participating TO shall design, procure, construct, install, and own the Network Upgrades and Distribution Upgrades described in Appendix A. The Interconnection Customer shall be responsible for all costs related to Distribution Upgrades. Unless the Participating TO elects to fund the capital for the Distribution Upgrades and Network Upgrades, they shall be funded by the Interconnection Customer in an amount determined pursuant to the methodology set forth in Section 13 of the LGIP. This specific amount is set forth in Appendix G to this LGIA.
- 11.4 Transmission Credits.** No later than thirty (30) Calendar Days prior to the Commercial Operation Date, the Interconnection Customer may make a one-time election by written notice to the CAISO and the Participating TO to receive Firm Transmission Rights or Congestion Revenue Rights as defined in and as available under the CAISO Tariff at the time of the election in accordance with the CAISO Tariff, in lieu of a refund of the cost of Network Upgrades in accordance with Article 11.4.1.

**11.4.1 Repayment of Amounts Advanced for Network Upgrades.** Upon the Commercial Operation Date, the Interconnection Customer shall be entitled to a repayment, equal to the total amount paid to the Participating TO for the costs of Network Upgrades for which it is responsible, as set forth in Appendix G. Such amount shall include any tax gross-up or other tax-related payments associated with Network Upgrades not refunded to the Interconnection Customer pursuant to Article 5.17.8 or otherwise, and shall be paid to the Interconnection Customer by the Participating TO on a dollar-for-dollar basis either through (1) direct payments made on a levelized basis over the five-year period commencing on the Commercial Operation Date; or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years from the Commercial Operation Date. Notwithstanding the foregoing, if this LGIA terminates within five (5) years from the Commercial Operation Date, the Participating TO's obligation to pay refunds to the Interconnection Customer shall cease as of the date of termination. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment. Interest shall continue to accrue on the repayment obligation so long as this LGIA is in effect. The Interconnection Customer may assign such repayment rights to any person.

If the Large Generating Facility fails to achieve Commercial Operation, but it or another Generating Facility is later constructed and makes use of the Network Upgrades, the Participating TO shall at that time reimburse Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the Generating Facility, if different, is responsible for identifying and demonstrating to the Participating TO the appropriate entity to which reimbursement must be made in order to implement the intent of this reimbursement obligation.

**11.4.2 Special Provisions for Affected Systems.** The Interconnection Customer shall enter into an agreement with the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid, as applicable, in accordance with the LGIP. Such agreement shall specify the terms governing payments to be made by the Interconnection Customer to the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid as well as the repayment by the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid. In no event shall the Participating TO be responsible for the repayment for any facilities that are not part of the Participating TO's Transmission System. In the event the Participating TO is a joint owner with an Affected System or with any other co-owner of a facility affected by the Large Generating Facility, the Participating TO's obligation to reimburse the Interconnection Customer for payments made to address the impacts of the Large Generating Facility on the system shall not exceed the proportionate amount of the cost of any upgrades attributable to the proportion of the jointly-owned facility owned by the Participating TO.

- 11.4.3** Notwithstanding any other provision of this LGIA, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, Congestion Revenue Rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements, merchant transmission Congestion Revenue Rights in accordance with Section 36.11 of the CAISO Tariff, or transmission credits for transmission service that is not associated with the Large Generating Facility.
- 11.5 Provision of Interconnection Financial Security.** The Interconnection Customer is obligated to provide all necessary Interconnection Financial Security required under Section 9 of the LGIP in a manner acceptable under Section 9 of the LGIP. Failure to satisfy the LGIP's requirements for the provision of Interconnection Financial Security shall result in the Interconnection Request being deemed withdrawn and subject to LGIP Section 3.8.
- 11.6 Interconnection Customer Compensation.** If the CAISO requests or directs the Interconnection Customer to provide a service pursuant to Articles 9.6.3 (Payment for Reactive Power) or 13.5.1 of this LGIA, the CAISO shall compensate the Interconnection Customer in accordance with the CAISO Tariff.
- 11.6.1 Interconnection Customer Compensation for Actions During Emergency Condition.** The CAISO shall compensate the Interconnection Customer in accordance with the CAISO Tariff for its provision of real and reactive power and other Emergency Condition services that the Interconnection Customer provides to support the CAISO Controlled Grid during an Emergency Condition in accordance with Article 11.6.

## ARTICLE 12. INVOICE

- 12.1 General.** The Participating TO shall submit to the Interconnection Customer, on a monthly basis, invoices of amounts due pursuant to this LGIA for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party under this LGIA, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party. Notwithstanding the foregoing, any invoices between the CAISO and another Party shall be submitted and paid in accordance with the CAISO Tariff.

- 12.2 Final Invoice.** As soon as reasonably practicable, but within twelve months after completion of the construction of the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, the Participating TO shall provide an invoice of the final cost of the construction of the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, and shall set forth such costs in sufficient detail to enable the Interconnection Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates. With respect to costs associated with the Participating TO's Interconnection Facilities and Distribution Upgrades, the Participating TO shall refund to the Interconnection Customer any amount by which the actual payment by the Interconnection Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice; or, in the event the actual costs of construction exceed the Interconnection Customer's actual payment for estimated costs, then the Interconnection Customer shall pay to the Participating TO any amount by which the actual costs of construction exceed the actual payment by the Interconnection Customer for estimated costs within thirty (30) Calendar Days of the issuance of such final construction invoice. With respect to costs associated with Network Upgrades, the Participating TO shall refund to the Interconnection Customer any amount by which the actual payment by the Interconnection Customer for estimated costs exceeds the actual costs of construction multiplied by the Interconnection Customer's percentage share of those costs, as set forth in Appendix G to this LGIA within thirty (30) Calendar Days of the issuance of such final construction invoice. In the event the actual costs of construction multiplied by the Interconnection Customer's percentage share of those costs exceed the Interconnection Customer's actual payment for estimated costs, then the Participating TO shall recover such difference through its transmission service rates.
- 12.3 Payment.** Invoices shall be rendered to the Interconnection Customer at the address specified in Appendix F. The Interconnection Customer shall pay, or Participating TO shall refund, the amounts due within thirty (30) Calendar Days of the Interconnection Customer's receipt of the invoice. All payments shall be made in immediately available funds payable to the Interconnection Customer or Participating TO, or by wire transfer to a bank named and account designated by the invoicing Interconnection Customer or Participating TO. Payment of invoices by any Party will not constitute a waiver of any rights or claims any Party may have under this LGIA.
- 12.4 Disputes.** In the event of a billing dispute between the Interconnection Customer and the Participating TO, the Participating TO and the CAISO shall continue to provide Interconnection Service under this LGIA as long as the Interconnection Customer: (i) continues to make all payments not in dispute; and (ii) pays to the Participating TO or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If the Interconnection Customer fails to meet these two requirements for continuation of service, then the Participating TO may provide notice to the Interconnection Customer of a Default pursuant to Article 17. Within thirty (30) Calendar Days after the resolution of the dispute, the Party that owes money to the other Party shall pay the amount due with interest calculated in accordance with the methodology set forth in FERC's Regulations at 18 C.F.R. § 35.19a(a)(2)(iii). Notwithstanding the foregoing, any billing dispute between the CAISO and another Party shall be resolved in accordance with the provisions of Article 27 of this LGIA.



## ARTICLE 13. EMERGENCIES

### 13.1 [Reserved]

**13.2 Obligations.** Each Party shall comply with the Emergency Condition procedures of the CAISO, NERC, the Applicable Reliability Council, Applicable Reliability Standards, Applicable Laws and Regulations, and any emergency procedures set forth in this LGIA.

**13.3 Notice.** The Participating TO or the CAISO shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that affects the Participating TO's Interconnection Facilities or Distribution System or the CAISO Controlled Grid, respectively, that may reasonably be expected to affect the Interconnection Customer's operation of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. The Interconnection Customer shall notify the Participating TO and the CAISO promptly when it becomes aware of an Emergency Condition that affects the Large Generating Facility or the Interconnection Customer's Interconnection Facilities that may reasonably be expected to affect the CAISO Controlled Grid or the Participating TO's Interconnection Facilities. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of the Interconnection Customer's or Participating TO's facilities and operations, its anticipated duration and the corrective action taken and/or to be taken. The initial notice shall be followed as soon as practicable with written notice, if requested by a Party, which may be provided by electronic mail or facsimile, or in the case of the CAISO may be publicly posted on the CAISO's internet web site.

**13.4 Immediate Action.** Unless, in the Interconnection Customer's reasonable judgment, immediate action is required, the Interconnection Customer shall obtain the consent of the CAISO and the Participating TO, such consent to not be unreasonably withheld, prior to performing any manual switching operations at the Large Generating Facility or the Interconnection Customer's Interconnection Facilities in response to an Emergency Condition declared by the Participating TO or CAISO or in response to any other emergency condition.

### 13.5 CAISO and Participating TO Authority.

**13.5.1 General.** The CAISO and Participating TO may take whatever actions or inactions, including issuance of dispatch instructions, with regard to the CAISO Controlled Grid or the Participating TO's Interconnection Facilities or Distribution System they deem necessary during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the CAISO Controlled Grid or the Participating TO's Interconnection Facilities or Distribution System, and (iii) limit or prevent damage, and (iv) expedite restoration of service.

The Participating TO and the CAISO shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. The Participating TO or the CAISO may, on the basis of technical considerations, require the Large Generating Facility to mitigate an Emergency Condition by taking actions necessary and limited in scope to remedy the Emergency Condition, including, but not limited to, directing the Interconnection Customer to shut-down, start-up, increase or decrease the real or reactive power output of the Large Generating Facility; implementing a reduction or disconnection pursuant to Article 13.5.2; directing the Interconnection Customer to assist with black start (if available) or restoration efforts; or altering the outage schedules of the Large Generating Facility and the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall comply with all of the CAISO's and Participating TO's operating instructions concerning Large Generating Facility real power and reactive power output within the manufacturer's design limitations of the Large Generating Facility's equipment that is in service and physically available for operation at the time, in compliance with Applicable Laws and Regulations.

**13.5.2 Reduction and Disconnection.** The Participating TO or the CAISO may reduce Interconnection Service or disconnect the Large Generating Facility or the Interconnection Customer's Interconnection Facilities when such reduction or disconnection is necessary under Good Utility Practice due to Emergency Conditions. These rights are separate and distinct from any right of curtailment of the CAISO pursuant to the CAISO Tariff. When the CAISO or Participating TO can schedule the reduction or disconnection in advance, the CAISO or Participating TO shall notify the Interconnection Customer of the reasons, timing and expected duration of the reduction or disconnection. The CAISO or Participating TO shall coordinate with the Interconnection Customer using Good Utility Practice to schedule the reduction or disconnection during periods of least impact to the Interconnection Customer and the CAISO and Participating TO. Any reduction or disconnection shall continue only for so long as reasonably necessary under Good Utility Practice. The Parties shall cooperate with each other to restore the Large Generating Facility, the Interconnection Facilities, and the CAISO Controlled Grid to their normal operating state as soon as practicable consistent with Good Utility Practice.

**13.6 Interconnection Customer Authority.** Consistent with Good Utility Practice, this LGIA, and the CAISO Tariff, the Interconnection Customer may take actions or inactions with regard to the Large Generating Facility or the Interconnection Customer's Interconnection Facilities during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service. Interconnection Customer shall use Reasonable Efforts to minimize the effect of such actions or inactions on the CAISO Controlled Grid and the Participating TO's Interconnection Facilities. The CAISO and Participating TO shall use Reasonable Efforts to assist Interconnection Customer in such actions.

**13.7 Limited Liability.** Except as otherwise provided in Article 11.6.1 of this LGIA, no Party shall be liable to any other Party for any action it takes in responding to an Emergency Condition so long as such action is made in good faith and is consistent with Good Utility Practice.

#### **ARTICLE 14. REGULATORY REQUIREMENTS AND GOVERNING LAW**

- 14.1 Regulatory Requirements.** Each Party's obligations under this LGIA shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the applying Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek and use its Reasonable Efforts to obtain such other approvals. Nothing in this LGIA shall require the Interconnection Customer to take any action that could result in its inability to obtain, or its loss of, status or exemption under the Federal Power Act or the Public Utility Holding Company Act of 1935, as amended, or the Public Utility Regulatory Policies Act of 1978, or the Energy Policy Act of 2005.
- 14.2 Governing Law.**
- 14.2.1** The validity, interpretation and performance of this LGIA and each of its provisions shall be governed by the laws of the state where the Point of Interconnection is located, without regard to its conflicts of law principles.
- 14.2.2** This LGIA is subject to all Applicable Laws and Regulations.
- 14.2.3** Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, rules, or regulations of a Governmental Authority.

#### **ARTICLE 15. NOTICES**

- 15.1 General.** Unless otherwise provided in this LGIA, any notice, demand or request required or permitted to be given by a Party to another and any instrument required or permitted to be tendered or delivered by a Party in writing to another shall be effective when delivered and may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered mail, addressed to the Party, or personally delivered to the Party, at the address set out in Appendix F, Addresses for Delivery of Notices and Billings.
- A Party must update the information in Appendix F as information changes. A Party may change the notice information in this LGIA by giving five (5) Business Days written notice prior to the effective date of the change. Such changes shall not constitute an amendment to this LGIA.
- 15.2 Billings and Payments.** Billings and payments shall be sent to the addresses set out in Appendix F.
- 15.3 Alternative Forms of Notice.** Any notice or request required or permitted to be given by a Party to another and not required by this LGIA to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out in Appendix F.
- 15.4 Operations and Maintenance Notice.** Each Party shall notify the other Parties in writing of the identity of the person(s) that it designates as the point(s) of contact with respect to the implementation of Articles 9 and 10.

## ARTICLE 16. FORCE MAJEURE

### 16.1 Force Majeure.

16.1.1 Economic hardship is not considered a Force Majeure event.

16.1.2 No Party shall be considered to be in Default with respect to any obligation hereunder, (including obligations under Article 4), other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other Party in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this Article shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall exercise due diligence to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

## ARTICLE 17. DEFAULT

### 17.1 Default.

17.1.1 **General.** No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this LGIA or the result of an act or omission of the other Party. Upon a Breach, the affected non-Breaching Party(ies) shall give written notice of such Breach to the Breaching Party. Except as provided in Article 17.1.2, the Breaching Party shall have thirty (30) Calendar Days from receipt of the Default notice within which to cure such Breach; provided however, if such Breach is not capable of cure within thirty (30) Calendar Days, the Breaching Party shall commence such cure within thirty (30) Calendar Days after notice and continuously and diligently complete such cure within ninety (90) Calendar Days from receipt of the Default notice; and, if cured within such time, the Breach specified in such notice shall cease to exist.

17.1.2 **Right to Terminate.** If a Breach is not cured as provided in this Article, or if a Breach is not capable of being cured within the period provided for herein, the affected non-Breaching Party(ies) shall have the right to declare a Default and terminate this LGIA by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not such Party(ies) terminates this LGIA, to recover from the Breaching Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this Article will survive termination of this LGIA.

**ARTICLE 18. INDEMNITY, CONSEQUENTIAL DAMAGES AND INSURANCE**

**18.1 Indemnity.** Each Party shall at all times indemnify, defend, and hold the other Parties harmless from, any and all Losses arising out of or resulting from another Party's action or inactions of its obligations under this LGIA on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the Indemnified Party.

**18.1.1 Indemnified Party.** If an Indemnified Party is entitled to indemnification under this Article 18 as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 18.1, to assume the defense of such claim, such Indemnified Party may at the expense of the Indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

**18.1.2 Indemnifying Party.** If an Indemnifying Party is obligated to indemnify and hold any Indemnified Party harmless under this Article 18, the amount owing to the Indemnified Party shall be the amount of such Indemnified Party's actual Loss, net of any insurance or other recovery.

**18.1.3 Indemnity Procedures.** Promptly after receipt by an Indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 18.1 may apply, the Indemnified Party shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Party. If the defendants in any such action include one or more Indemnified Parties and the Indemnifying Party and if the Indemnified Party reasonably concludes that there may be legal defenses available to it and/or other Indemnified Parties which are different from or additional to those available to the Indemnifying Party, the Indemnified Party shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Party or Indemnified Parties having such differing or additional legal defenses.

The Indemnified Party shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Party and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Party, or there exists a conflict or adversity of interest between the Indemnified Party and the Indemnifying Party, in such event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Party, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Party, which shall not be unreasonably withheld, conditioned or delayed.

- 18.2 Consequential Damages.** Other than the liquidated damages heretofore described in Article 5.3, in no event shall any Party be liable under any provision of this LGIA for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to another Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.
- 18.3 Insurance.** Each Party shall, at its own expense, maintain in force throughout the period of this LGIA, and until released by the other Parties, the following minimum insurance coverages, with insurers rated no less than A- (with a minimum size rating of VII) by Bests' Insurance Guide and Key Ratings and authorized to do business in the state where the Point of Interconnection is located, except in the case of the CAISO, the State of California:
- 18.3.1** Employer's Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located, except in the case of the CAISO, the State of California.
  - 18.3.2** Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate combined single limit for personal injury, bodily injury, including death and property damage.
  - 18.3.3** Business Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage.
  - 18.3.4** Excess Public Liability Insurance over and above the Employer's Liability Commercial General Liability and Business Automobile Liability Insurance coverage, with a minimum combined single limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.
  - 18.3.5** The Commercial General Liability Insurance, Business Automobile Insurance and Excess Public Liability Insurance policies shall name the other Parties, their parents, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this LGIA against the Other Party Group and provide thirty (30) Calendar Days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition.

- 18.3.6** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Public Liability Insurance policies shall contain provisions that specify that the policies are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Party shall be responsible for its respective deductibles or retentions.
- 18.3.7** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Public Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this LGIA, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed by the Parties.
- 18.3.8** The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this LGIA.
- 18.3.9** Within ten (10) Calendar Days following execution of this LGIA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) Calendar Days thereafter, each Party shall provide certification of all insurance required in this LGIA, executed by each insurer or by an authorized representative of each insurer.
- 18.3.10** Notwithstanding the foregoing, each Party may self-insure to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program; provided that, such Party's senior unsecured debt or issuer rating is BBB-, or better, as rated by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior unsecured debt rating and issuer rating are both unrated by Standard & Poor's or are both rated at less than BBB- by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9. In the event that a Party is permitted to self-insure pursuant to this Article 18.3.10, it shall notify the other Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.
- 18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this LGIA.

#### ARTICLE 19. ASSIGNMENT

- 19.1 Assignment.** This LGIA may be assigned by a Party only with the written consent of the other Parties; provided that a Party may assign this LGIA without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this LGIA; and provided further that the Interconnection Customer shall have the right to assign this LGIA, without the consent of the CAISO or Participating TO, for collateral security purposes to aid in providing financing for the Large Generating Facility, provided that the Interconnection Customer will promptly notify the CAISO and Participating TO of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the CAISO and Participating TO of the date and particulars of any such exercise of assignment right(s), including providing the CAISO and Participating TO with proof that it meets the requirements of Articles 11.5 and 18.3. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this LGIA shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

#### ARTICLE 20. SEVERABILITY

- 20.1 Severability.** If any provision in this LGIA is finally determined to be invalid, void or unenforceable by any court or other Governmental Authority having jurisdiction, such determination shall not invalidate, void or make unenforceable any other provision, agreement or covenant of this LGIA; provided that if the Interconnection Customer (or any third party, but only if such third party is not acting at the direction of the Participating TO or CAISO) seeks and obtains such a final determination with respect to any provision of the Alternate Option (Article 5.1.2), or the Negotiated Option (Article 5.1.4), then none of the provisions of Article 5.1.2 or 5.1.4 shall thereafter have any force or effect and the Parties' rights and obligations shall be governed solely by the Standard Option (Article 5.1.1).

#### ARTICLE 21. COMPARABILITY

- 21.1 Comparability.** The Parties will comply with all applicable comparability and code of conduct laws, rules and regulations, as amended from time to time.

#### ARTICLE 22. CONFIDENTIALITY

- 22.1 Confidentiality.** Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by any of the Parties to the other Parties prior to the execution of this LGIA.



Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Parties receiving the information that the information is confidential.

If requested by any Party, the other Parties shall provide in writing, the basis for asserting that the information referred to in this Article 22 warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

**22.1.1 Term.** During the term of this LGIA, and for a period of three (3) years after the expiration or termination of this LGIA, except as otherwise provided in this Article 22, each Party shall hold in confidence and shall not disclose to any person Confidential Information.

**22.1.2 Scope.** Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of this LGIA; or (6) is required, in accordance with Article 22.1.7 of this LGIA, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this LGIA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

**22.1.3 Release of Confidential Information.** No Party shall release or disclose Confidential Information to any other person, except to its employees, consultants, Affiliates (limited by the Standards of Conduct requirements set forth in Part 358 of FERC's Regulations, 18 C.F.R. 358), subcontractors, or to parties who may be or considering providing financing to or equity participation with the Interconnection Customer, or to potential purchasers or assignees of the Interconnection Customer, on a need-to-know basis in connection with this LGIA, unless such person has first been advised of the confidentiality provisions of this Article 22 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 22.

**22.1.4 Rights.** Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Parties. The disclosure by each Party to the other Parties of Confidential Information shall not be deemed a waiver by a Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

- 22.1.5 No Warranties.** The mere fact that a Party has provided Confidential Information does not constitute a warranty or representation as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to the other Parties nor to enter into any further agreements or proceed with any other relationship or joint venture.
- 22.1.6 Standard of Care.** Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under this LGIA or its regulatory requirements.
- 22.1.7 Order of Disclosure.** If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Parties with prompt notice of such request(s) or requirement(s) so that the other Parties may seek an appropriate protective order or waive compliance with the terms of this LGIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.
- 22.1.8 Termination of Agreement.** Upon termination of this LGIA for any reason, each Party shall, within ten (10) Calendar Days of receipt of a written request from another Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the other Party) or return to the other Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the other Party.
- 22.1.9 Remedies.** The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this Article 22. Each Party accordingly agrees that the other Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Article 22, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 22, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 22.

**22.1.10 Disclosure to FERC, its Staff, or a State.** Notwithstanding anything in this Article 22 to the contrary, and pursuant to 18 C.F.R. section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this LGIA, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. section 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this LGIA prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other Parties to the LGIA when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

**22.1.11** Subject to the exception in Article 22.1.10, Confidential Information shall not be disclosed by the other Parties to any person not employed or retained by the other Parties, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Parties, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this LGIA or as a transmission service provider or a Balancing Authority including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. The Party asserting confidentiality shall notify the other Parties in writing of the information it claims is confidential. Prior to any disclosures of another Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

## **ARTICLE 23. ENVIRONMENTAL RELEASES**

**23.1** Each Party shall notify the other Parties, first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Large Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Parties. The notifying Party shall: (i) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than twenty-four hours after such Party becomes aware of the occurrence; and (ii) promptly furnish to the other Parties copies of any publicly available reports filed with any Governmental Authorities addressing such events.

## ARTICLE 24. INFORMATION REQUIREMENTS

- 24.1 Information Acquisition.** The Participating TO and the Interconnection Customer shall submit specific information regarding the electrical characteristics of their respective facilities to each other as described below and in accordance with Applicable Reliability Standards.
- 24.2 Information Submission by Participating TO.** The initial information submission by the Participating TO shall occur no later than one hundred eighty (180) Calendar Days prior to Trial Operation and shall include the Participating TO's Transmission System information necessary to allow the Interconnection Customer to select equipment and meet any system protection and stability requirements, unless otherwise agreed to by the Participating TO and the Interconnection Customer. On a monthly basis the Participating TO shall provide the Interconnection Customer and the CAISO a status report on the construction and installation of the Participating TO's Interconnection Facilities and Network Upgrades, including, but not limited to, the following information: (1) progress to date; (2) a description of the activities since the last report; (3) a description of the action items for the next period; and (4) the delivery status of equipment ordered.
- 24.3 Updated Information Submission by Interconnection Customer.** The updated information submission by the Interconnection Customer, including manufacturer information, shall occur no later than one hundred eighty (180) Calendar Days prior to the Trial Operation. The Interconnection Customer shall submit a completed copy of the Electric Generating Unit data requirements contained in Appendix 1 to the LGIP. It shall also include any additional information provided to the Participating TO and the CAISO for the Interconnection Studies. Information in this submission shall be the most current Electric Generating Unit design or expected performance data. Information submitted for stability models shall be compatible with the Participating TO and CAISO standard models. If there is no compatible model, the Interconnection Customer will work with a consultant mutually agreed to by the Parties to develop and supply a standard model and associated information.
- If the Interconnection Customer's data is materially different from what was originally provided to the Participating TO and the CAISO for the Interconnection Studies, then the Participating TO and the CAISO will conduct appropriate studies pursuant to the LGIP to determine the impact on the Participating TO's Transmission System and affected portions of the CAISO Controlled Grid based on the actual data submitted pursuant to this Article 24.3. The Interconnection Customer shall not begin Trial Operation until such studies are completed and all other requirements of this LGIA are satisfied.
- 24.4 Information Supplementation.** Prior to the Trial Operation date, the Parties shall supplement their information submissions described above in this Article 24 with any and all "as-built" Electric Generating Unit information or "as-tested" performance information that differs from the initial submissions or, alternatively, written confirmation that no such differences exist. The Interconnection Customer shall conduct tests on the Electric Generating Unit as required by Good Utility Practice such as an open circuit "step voltage" test on the Electric Generating Unit to verify proper operation of the Electric Generating Unit's automatic voltage regulator.

Unless otherwise agreed, the test conditions shall include: (1) Electric Generating Unit at synchronous speed; (2) automatic voltage regulator on and in voltage control mode; and (3) a five percent (5 percent) change in Electric Generating Unit terminal voltage initiated by a change in the voltage regulators reference voltage. The Interconnection Customer shall provide validated test recordings showing the responses of Electric Generating Unit terminal and field voltages. In the event that direct recordings of these voltages is impractical, recordings of other voltages or currents that mirror the response of the Electric Generating Unit's terminal or field voltage are acceptable if information necessary to translate these alternate quantities to actual Electric Generating Unit terminal or field voltages is provided. Electric Generating Unit testing shall be conducted and results provided to the Participating TO and the CAISO for each individual Electric Generating Unit in a station.

Subsequent to the Commercial Operation Date, the Interconnection Customer shall provide the Participating TO and the CAISO any information changes due to equipment replacement, repair, or adjustment. The Participating TO shall provide the Interconnection Customer any information changes due to equipment replacement, repair or adjustment in the directly connected substation or any adjacent Participating TO-owned substation that may affect the Interconnection Customer's Interconnection Facilities equipment ratings, protection or operating requirements. The Parties shall provide such information pursuant to Article 5.19.

#### **ARTICLE 25. INFORMATION ACCESS AND AUDIT RIGHTS**

- 25.1 Information Access.** Each Party (the "disclosing Party") shall make available to the other Party information that is in the possession of the disclosing Party and is necessary in order for the other Party to: (i) verify the costs incurred by the disclosing Party for which the other Party is responsible under this LGIA; and (ii) carry out its obligations and responsibilities under this LGIA. The Parties shall not use such information for purposes other than those set forth in this Article 25.1 and to enforce their rights under this LGIA. Nothing in this Article 25 shall obligate the CAISO to make available to a Party any third party information in its possession or control if making such third party information available would violate a CAISO Tariff restriction on the use or disclosure of such third party information.
- 25.2 Reporting of Non-Force Majeure Events.** Each Party (the "notifying Party") shall notify the other Parties when the notifying Party becomes aware of its inability to comply with the provisions of this LGIA for a reason other than a Force Majeure event. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this Article shall not entitle the Party receiving such notification to allege a cause for anticipatory breach of this LGIA.
- 25.3 Audit Rights.** Subject to the requirements of confidentiality under Article 22 of this LGIA, the Parties' audit rights shall include audits of a Party's costs pertaining to such Party's performance or satisfaction of obligations owed to the other Party under this LGIA, calculation of invoiced amounts, the CAISO's efforts to allocate responsibility for the provision of reactive support to the CAISO Controlled Grid, the CAISO's efforts to allocate responsibility for interruption or reduction of generation on the CAISO Controlled Grid, and each such Party's actions in an Emergency Condition.

**25.3.1** The Interconnection Customer and the Participating TO shall each have the right, during normal business hours, and upon prior reasonable notice to the other Party, to audit at its own expense the other Party's accounts and records pertaining to either such Party's performance or either such Party's satisfaction of obligations owed to the other Party under this LGIA. Subject to Article 25.3.2, any audit authorized by this Article shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to each such Party's performance and satisfaction of obligations under this LGIA. Each such Party shall keep such accounts and records for a period equivalent to the audit rights periods described in Article 25.4.

**25.3.2** Notwithstanding anything to the contrary in Article 25.3, each Party's rights to audit the CAISO's accounts and records shall be as set forth in Section 22.1 of the CAISO Tariff.

**25.4 Audit Rights Periods.**

**25.4.1 Audit Rights Period for Construction-Related Accounts and Records.** Accounts and records related to the design, engineering, procurement, and construction of Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades constructed by the Participating TO shall be subject to audit for a period of twenty-four months following the Participating TO's issuance of a final invoice in accordance with Article 12.2. Accounts and records related to the design, engineering, procurement, and construction of Participating TO's Interconnection Facilities and/or Stand Alone Network Upgrades constructed by the Interconnection Customer shall be subject to audit and verification by the Participating TO and the CAISO for a period of twenty-four months following the Interconnection Customer's issuance of a final invoice in accordance with Article 5.2(8).

**25.4.2 Audit Rights Period for All Other Accounts and Records.** Accounts and records related to a Party's performance or satisfaction of all obligations under this LGIA other than those described in Article 25.4.1 shall be subject to audit as follows: (i) for an audit relating to cost obligations, the applicable audit rights period shall be twenty-four months after the auditing Party's receipt of an invoice giving rise to such cost obligations; and (ii) for an audit relating to all other obligations, the applicable audit rights period shall be twenty-four months after the event for which the audit is sought; provided that each Party's rights to audit the CAISO's accounts and records shall be as set forth in Section 22.1 of the CAISO Tariff.

**25.5 Audit Results.** If an audit by the Interconnection Customer or the Participating TO determines that an overpayment or an underpayment has occurred with respect to the other Party, a notice of such overpayment or underpayment shall be given to the other Party together with those records from the audit which supports such determination. The Party that is owed payment shall render an invoice to the other Party and such invoice shall be paid pursuant to Article 12 hereof.

**25.5.1** Notwithstanding anything to the contrary in Article 25.5, the Interconnection Customer's and Participating TO's rights to audit the CAISO's accounts and records shall be as set forth in Section 22.1 of the CAISO Tariff, and the CAISO's process for remedying an overpayment or underpayment shall be as set forth in the CAISO Tariff.

## ARTICLE 26. SUBCONTRACTORS

- 26.1 General.** Nothing in this LGIA shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this LGIA; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this LGIA in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.
- 26.2 Responsibility of Principal.** The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this LGIA. The hiring Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the CAISO or Participating TO be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under Article 5 of this LGIA. Any applicable obligation imposed by this LGIA upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.
- 26.3 No Limitation by Insurance.** The obligations under this Article 26 will not be limited in any way by any limitation of subcontractor's insurance.

## ARTICLE 27. DISPUTES

All disputes arising out of or in connection with this LGIA whereby relief is sought by or from the CAISO shall be settled in accordance with the provisions of Article 13 of the CAISO Tariff, except that references to the CAISO Tariff in such Article 13 of the CAISO Tariff shall be read as references to this LGIA. Disputes arising out of or in connection with this LGIA not subject to provisions of Article 13 of the CAISO Tariff shall be resolved as follows:

- 27.1 Submission.** In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with this LGIA or its performance, such Party (the "disputing Party") shall provide the other Party with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this LGIA.

- 27.2 External Arbitration Procedures.** Any arbitration initiated under this LGIA shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) Calendar Days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules") and any applicable FERC regulations; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Article 27, the terms of this Article 27 shall prevail.
- 27.3 Arbitration Decisions.** Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of this LGIA and shall have no power to modify or change any provision of this Agreement in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator(s) must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.
- 27.4 Costs.** Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

## ARTICLE 28. REPRESENTATIONS, WARRANTIES AND COVENANTS

- 28.1 General.** Each Party makes the following representations, warranties and covenants:
- 28.1.1 Good Standing.** Such Party is duly organized, validly existing and in good standing under the laws of the state in which it is organized, formed, or incorporated, as applicable; that it is qualified to do business in the state or states in which the Large Generating Facility, Interconnection Facilities and Network Upgrades owned by such Party, as applicable, are located; and that it has the corporate power and authority to own its properties, to carry on its business as now being conducted and to enter into this LGIA and carry out the transactions contemplated hereby and perform and carry out all covenants and obligations on its part to be performed under and pursuant to this LGIA.



- 28.1.2 Authority.** Such Party has the right, power and authority to enter into this LGIA, to become a Party hereto and to perform its obligations hereunder. This LGIA is a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).
- 28.1.3 No Conflict.** The execution, delivery and performance of this LGIA does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Party, or any judgment, license, permit, order, material agreement or instrument applicable to or binding upon such Party or any of its assets.
- 28.1.4 Consent and Approval.** Such Party has sought or obtained, or, in accordance with this LGIA will seek or obtain, each consent, approval, authorization, order, or acceptance by any Governmental Authority in connection with the execution, delivery and performance of this LGIA, and it will provide to any Governmental Authority notice of any actions under this LGIA that are required by Applicable Laws and Regulations.

#### **ARTICLE 29. [RESERVED]**

#### **ARTICLE 30. MISCELLANEOUS**

- 30.1 Binding Effect.** This LGIA and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 30.2 Conflicts.** In the event of a conflict between the body of this LGIA and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this LGIA shall prevail and be deemed the final intent of the Parties.
- 30.3 Rules of Interpretation.** This LGIA, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this LGIA, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this LGIA), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any Applicable Laws and Regulations means such Applicable Laws and Regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article of this LGIA or such Appendix to this LGIA, or such Section to the LGIP or such Appendix to the LGIP, as the case may be;

(6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this LGIA as a whole and not to any particular Article or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".

- 30.4 Entire Agreement.** This LGIA, including all Appendices and Schedules attached hereto, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between or among the Parties with respect to the subject matter of this LGIA. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this LGIA.
- 30.5 No Third Party Beneficiaries.** This LGIA is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.
- 30.6 Waiver.** The failure of a Party to this LGIA to insist, on any occasion, upon strict performance of any provision of this LGIA will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this LGIA shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this LGIA. Termination or Default of this LGIA for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO. Any waiver of this LGIA shall, if requested, be provided in writing.

- 30.7 Headings.** The descriptive headings of the various Articles of this LGIA have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this LGIA.
- 30.8 Multiple Counterparts.** This LGIA may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 30.9 Amendment.** The Parties may by mutual agreement amend this LGIA by a written instrument duly executed by all of the Parties. Such amendment shall become effective and a part of this LGIA upon satisfaction of all Applicable Laws and Regulations.
- 30.10 Modification by the Parties.** The Parties may by mutual agreement amend the Appendices to this LGIA by a written instrument duly executed by all of the Parties. Such amendment shall become effective and a part of this LGIA upon satisfaction of all Applicable Laws and Regulations.

**30.11 Reservation of Rights.** The CAISO and Participating TO shall each have the right to make a unilateral filing with FERC to modify this LGIA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles and Appendices of this LGIA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these Articles and Appendices:

Recitals, 1, 2.1, 2.2, 2.3, 2.4, 2.6, 3.1, 3.3, 4.1, 4.2, 4.3, 4.4, 5 preamble, 5.4, 5.7, 5.8, 5.9, 5.12, 5.13, 5.18, 5.19.1, 7.1, 7.2, 8, 9.1, 9.2, 9.3, 9.5, 9.6, 9.7, 9.8, 9.10, 10.3, 11.4, 12.1, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24.3, 24.4, 25.1, 25.2, 25.3 (excluding subparts), 25.4.2, 26, 28, 29, 30, Appendix D, Appendix F, Appendix G, and any other Article not reserved exclusively to the Participating TO or the CAISO below.

The Participating TO shall have the exclusive right to make a unilateral filing with FERC to modify this LGIA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles and Appendices of this LGIA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these Articles and Appendices:

2.5, 5.1, 5.2, 5.3, 5.5, 5.6, 5.10, 5.11, 5.14, 5.15, 5.16, 5.17, 5.19 (excluding 5.19.1), 6, 7.3, 9.4, 9.9, 10.1, 10.2, 10.4, 10.5, 11.1, 11.2, 11.3, 11.5, 12.2, 12.3, 12.4, 24.1, 24.2, 25.3.1, 25.4.1, 25.5 (excluding 25.5.1), 27 (excluding preamble), Appendix A, Appendix B, Appendix C, and Appendix E.

The CAISO shall have the exclusive right to make a unilateral filing with FERC to modify this LGIA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles of this LGIA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these Articles:

3.2, 4.5, 11.6, 25.3.2, 25.5.1, and 27 preamble.

The Interconnection Customer, the CAISO, and the Participating TO shall have the right to make a unilateral filing with FERC to modify this LGIA pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this LGIA shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

**30.12 No Partnership.** This LGIA shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership among the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.

**30.13 Joint and Several Obligations.** Except as otherwise provided in this LGIA, the obligations of the CAISO, the Participating TO, and the Interconnection Customer are several, and are neither joint nor joint and several.

**IN WITNESS WHEREOF**, the Parties have executed this LGIA in multiple originals, each of which shall constitute and be an original effective agreement among the Parties.

**[Insert name of Interconnection Customer]**

By:

Title:

Date:

**[Insert name of Participating TO]**

By:

Title:

Date:

**California Independent System Operator Corporation**

By:

Title:

Date:

**Appendices to LGIA**

- Appendix A Interconnection Facilities, Network Upgrades and Distribution Upgrades
- Appendix B Milestones
- Appendix C Interconnection Details
- Appendix D Security Arrangements Details
- Appendix E Commercial Operation Date
- Appendix F Addresses for Delivery of Notices and Billings
- Appendix G Interconnection Customer's Proportional Share of Costs of Network Upgrades for Applicable Project Group
- Appendix H Interconnection Requirements for a Wind Generating Plant

**Appendix A  
To LGIA**

**Interconnection Facilities, Network Upgrades and Distribution Upgrades**

**1. Interconnection Facilities:**

(a) [insert Interconnection Customer's Interconnection Facilities]:

(b) [insert Participating TO's Interconnection Facilities]:

**2. Network Upgrades:**

(a) [insert Stand Alone Network Upgrades]:

(b) [insert Other Network Upgrades]:

(i) [insert Participating TO's Reliability Network Upgrades]

(ii) [insert Participating TO's Delivery Network Upgrades]

**3. Distribution Upgrades:**

**Appendix B  
To LGIA**

**Milestones**

**Appendix C  
To LGIA**

**Interconnection Details**



**Appendix D  
To LGIA**

**Security Arrangements Details**

Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, all Participating TOs, market participants, and Interconnection Customers interconnected to the CAISO Controlled Grid to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

The Interconnection Customer shall meet the requirements for security implemented pursuant to the CAISO Tariff, including the CAISO's standards for information security posted on the CAISO's internet web site at the following internet address: <http://www.caiso.com/pubinfo/info-security/index.html>.

**Appendix E  
To LGIA**

**Commercial Operation Date**

[This Appendix E sets forth a form of letter to be provided by the Interconnection Customer to the CAISO and Participating TO to provide formal notice of the Commercial Operation of an Electric Generating Unit.]

**[Date]**

**[CAISO Address]**

**[Participating TO Address]**

Re: \_\_\_\_\_ Electric Generating Unit

Dear \_\_\_\_\_:

On **[Date]** **[Interconnection Customer]** has completed Trial Operation of Unit No. \_\_\_\_\_. This letter confirms that **[Interconnection Customer]** commenced Commercial Operation of Unit No. \_\_\_\_\_ at the Electric Generating Unit, effective as of **[Date plus one day]** and that **[Interconnection Customer]** provided the CAISO's operations personnel advance notice of its intended Commercial Operation Date no less than five Business Days prior to that date.

Thank you.

**[Signature]**

**[Interconnection Customer Representative]**

**Appendix F  
To LGIA**

**Addresses for Delivery of Notices and Billings**

**Notices:**

Participating TO:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

CAISO:

[To be supplied.]

**Billings and Payments:**

Participating TO:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

CAISO:

[To be supplied.]

**Alternative Forms of Delivery of Notices (telephone, facsimile or e-mail):**

Participating TO:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

CAISO:

[To be supplied.]

**Appendix G  
To LGIA**

**Interconnection Customer's Proportional Share of Costs of Network Upgrades for Applicable  
Project Group**

**Appendix H  
To LGIA**

**INTERCONNECTION REQUIREMENTS FOR A WIND GENERATING PLANT**

Appendix H sets forth requirements and provisions specific to a wind generating plant. All other requirements of this LGIA continue to apply to wind generating plant interconnections.

**A. Technical Standards Applicable to a Wind Generating Plant**

**i. Low Voltage Ride-Through (LVRT) Capability**

A wind generating plant shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below.

All wind generating plants subject to FERC Order No. 661 must meet the following requirements:

1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 – 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the Participating TO. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the CAISO Controlled Grid. A wind generating plant shall remain interconnected during such a fault on the CAISO Controlled Grid for a voltage level as low as zero volts, as measured at the high voltage side of the wind GSU.
2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.
3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAR Compensator) within the wind generating plant or by a combination of generator performance and additional equipment.
5. Existing individual generator units that are, or have been, interconnected to the CAISO Controlled Grid at the same location at the effective date of the Appendix H LVRT Standard are exempt from meeting the Appendix H LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Appendix H LVRT Standard.

**ii. Power Factor Design Criteria (Reactive Power)**

A wind generating plant shall operate within a power factor within the range of 0.95 leading to 0.95 lagging, measured at the Point of Interconnection as defined in this LGIA in order to maintain a specified voltage schedule, if the Phase II Interconnection Study shows that such a requirement is necessary to ensure safety or reliability. The power factor range standard can be met by using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two, if agreed to by the Participating TO and CAISO. The Interconnection Customer shall not disable power factor equipment while the wind plant is in operation. Wind plants shall also be able to provide sufficient dynamic voltage support in lieu of the power system stabilizer and automatic voltage regulation at the generator excitation system if the Phase II Interconnection Study shows this to be required for system safety or reliability.

**iii. Supervisory Control and Data Acquisition (SCADA) Capability**

The wind plant shall provide SCADA capability to transmit data and receive instructions from the Participating TO and CAISO to protect system reliability. The Participating TO and CAISO and the wind plant Interconnection Customer shall determine what SCADA information is essential for the proposed wind plant, taking into account the size of the plant and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

**Attachment B1 – Clean Sheets**

**Generation Interconnection Process Reform Amendment Filing**

**4<sup>th</sup> Replacement MRTU Tariff**



Unified Planning Assumptions and Study Plan as set forth in Section 24.2.3, any applicable Interconnection Study, and in accordance with the Business Practice Manual, to determine the facilities needed to meet all Applicable Reliability Criteria and CAISO Planning Standards. The Participating TO with a PTO Service Area shall provide the CAISO and other Market Participants with all information relating to the studies performed under this Section, subject to any limitation provided in Section 20.2 or the applicable LGIP. The CAISO shall be free to propose any transmission upgrades or additions it deems necessary to ensure System Reliability consistent with Applicable Reliability Criteria and CAISO Planning Standards. The Participating TO with a PTO Service Territory in which the transmission upgrade or addition deemed needed under this Section 24.1.2 is to be located shall be the Project Sponsor, with the responsibility to construct, own and finance, and maintain such transmission upgrade or addition.

**24.1.3 Location Constrained Resource Interconnection Facility Projects.**

The CAISO, CPUC, CEC, a Participating TO or any other Market Participant may propose a transmission addition as a Location Constrained Resource Interconnection Facility. A proposal shall include the following information, to the extent available:

- (a) Information showing that the proposal meets the requirements of Section 24.1.3.1; and
- (b) A description of the proposed facility, including the following information:
  - (1) Transmission studies demonstrating that the proposed facility satisfies Applicable Reliability Criteria and CAISO Planning Standards;
  - (2) Identification of the most feasible and cost-effective alternative transmission additions, which may include network upgrades, that would accomplish the objective of the proposal;
  - (3) A planning level cost estimate for the proposed facility and all proposed alternatives;

**24.1.3.2 Demonstration of Interest in a Location Constrained Resource Interconnection Facility.**

A proponent of an LCRIF must demonstrate interest in the LCRIF equal to sixty percent (60%) or more of the capacity of the facility in the following manner:

- (a) the proponent's demonstration must include a showing that LCRIGs that would connect to the facility and would have a combined capacity equal to at least twenty-five percent (25%) of the capacity of the facility have executed Large Generator Interconnection Agreements or Small Generator Interconnection Agreements, as applicable; and
- (b) to the extent the showing pursuant to Section 24.1.3.2(a) does not constitute sixty percent (60%) of the capacity of the LCRIF, the proponent's demonstration of the remainder of the required minimum level of interest must include a showing that additional LCRIGs:
  - (1) in the case of Large Generating Facilities subject to the LGIP set forth in Appendix Y, have obtained Site Exclusivity or paid the Site Exclusivity Deposit in lieu of Site Exclusivity, provided that any Site Exclusivity Deposit paid pursuant to Section 3.5 of the LGIP set forth in Appendix Y shall satisfy this requirement, or, in the case of Large Generating Facilities subject to the LGIP set forth in Appendix U and Small Generating Facilities, have obtained control over their site or paid a deposit to the CAISO in the amount of \$250,000, which deposit shall be refundable if the LCRIF is not approved or is withdrawn by the proponent; and

- (2) have demonstrated interest in the LCRIF by one of the following methods:
- (i) executing a firm power sales agreement for the output of the LCRIG for a period of five years or longer; or
  - (ii) in the case of Large Generating Facilities subject to the LGIP set forth in Appendix Y, filing an Interconnection Request and paying the Interconnection Study Deposit required by Section 3.5 of the LGIP set forth in Appendix Y; or
  - (iii) in the case of Large Generating Facilities subject to the LGIP set forth in Appendix U and Small Generating Facilities, being in the CAISO's interconnection queue and paying a deposit to the CAISO equal to the sum of the minimum deposits required of an Interconnection Customer for all studies performed in accordance with the Large Generator Interconnection Procedures (Appendix U) or Small Generator Interconnection Procedures (Appendix S), as applicable to the LCRIG, less the amount of any deposits actually paid by the LCRIG for such studies. The deposit shall be credited toward such study costs.
- If

- the LCRIF is not approved or is withdrawn by the proponent, any deposit paid under this provision shall be refundable to the extent it exceeds costs incurred by the CAISO for such studies; or
- (iv) paying a deposit to the CAISO equal to five percent (5%) of the LCRIF's pro rata share of the capital costs of a proposed LCRIF. The deposit shall be credited toward costs of Interconnection Studies performed in connection with the Large Generator Interconnection Procedures (Appendix U or Appendix Y, as applicable) or Small Generator Interconnection Procedures (Appendix S), whichever is applicable. If the LCRIF is not approved or is withdrawn by the proponent, any deposit paid under this provision shall be refundable to the extent it exceeds the costs incurred by the CAISO for such studies.

**24.1.3.3 Coordination With Transmission Additions Proposed by Non-Participating TOs.**

In the event that a facility proposed as an LCRIF would connect to LCRIGs in an Energy Resource Area that would also be connected by a transmission facility that is in existence or is proposed to be constructed by an entity that is not a Participating TO and that does not intend to place that facility under the Operational Control of the CAISO, the CAISO shall coordinate with the entity owning or proposing that transmission facility through any regional planning process to avoid the unnecessary construction of duplicative transmission additions to connect the same LCRIGs to the CAISO Controlled Grid.

**24.1.3.4 Evaluation of Location Constrained Resource Interconnection Facilities.**

In evaluating whether a proposed LCRIF that meets the requirements of Section 24.1.3.1 is needed, and for purposes of ranking and prioritizing LCRIF projects, the CAISO will consider the following factors:

- (a) Whether, and if so, the extent to which, the facility meets or exceeds applicable CAISO Planning Standards, including standards that are Applicable Reliability Criteria.

- (b) Whether, and if so, the extent to which, the facility has the capability and flexibility both to interconnect potential LCRIGs in the Energy Resource Area and to be converted in the future to a network transmission facility.
- (c) Whether the projected cost of the facility is reasonable in light of its projected benefits, in comparison to the costs and benefits of other alternatives for connecting Generating Units or otherwise meeting a need identified in the CAISO Transmission Planning Process, including alternatives that are not LCRIFs. In making this determination, the CAISO shall take into account, among other factors, the following:
  - (1) The potential capacity of LCRIGs and the potential Energy that could be produced by LCRIGs in each Energy Resource Area;
  - (2) The capacity of LCRIGs in the CAISO's interconnection process for each Energy Resource Area;
  - (3) The projected cost and in-service date of the facility in comparison with other transmission facilities that could connect LCRIGs to the CAISO Controlled Grid;
  - (4) Whether, and if so, the extent to which, the facility would provide additional reliability or economic benefits to the CAISO Controlled Grid;  
and
  - (5) Whether, and if so, the extent to which, the facility would create a risk of stranded costs.

- (d) Identify existing and projected limitations of the CAISO Controlled Grid's physical, economic or operational capability or performance and identify transmission upgrades and additions, including alternatives thereto, deemed needed in accordance with Section 24.1 to address the existing and projected limitations.
- (e) Account for any effects on the CAISO Controlled Grid of the interconnection of Generating Units on the Distribution System under the Wholesale Distribution Access Tariffs of the Participating TOs, including an assessment of the deliverability of such Generating Units on a basis comparable to the Deliverability Assessment performed under Appendix U or Appendix Y, as applicable.

**24.2.1 CAISO Planning Standards Committee.**

The CAISO shall maintain a Planning Standards Committee, which shall be open to participation by all Market Participants, electric utility regulatory agencies within California, and other interested parties, to review, provide advice on, and propose modifications to CAISO Planning Standards for consideration by CAISO management and the CAISO Governing Board. The Planning Standards Committee shall meet, at a minimum, on an annual basis prior to publication of the draft Unified Planning Assumptions and Study Plan under Section 24.2.3; however, additional meetings, web conferences, teleconferences may be scheduled as needed. Meetings of the Planning Standards Committee shall be noticed by Market Notice and such notice shall be posted to the CAISO Website. Teleconference capability will be made available for all meetings of the Planning Standards Committee. The CAISO Vice President of Planning and Infrastructure Development or his or her designee shall serve as chair of the Planning Standards Committee. All materials addressed at or relating to such meetings, including agendas, presentations, background papers, party comments, and minutes shall be posted to the CAISO Website. The chair of

the Planning Standards Committee shall seek approval by the CAISO Governing Board of any modifications to the CAISO Planning Standards, as those CAISO Planning Standards exist as of the effective date of Section 24.2, and must include in the report to the CAISO Governing Board a summary of the positions of parties with respect to the proposed modifications to the CAISO Planning Standards and the ground(s) for rejecting modifications, if any, proposed by Market Participants or other interested parties.

**24.2.2 Request Window.**

Market Participants may propose Economic Planning Studies and transmission upgrades or additions for inclusion in the annual Transmission Plan during a Request Window. The duration of the Request Window will be set forth in the Business Practice Manual and will occur in the year prior to the year in which the Transmission Plan is prepared. Proposals for Economic Planning Studies and transmission upgrades or additions must use the forms and satisfy the information and technical requirements set forth in the Business Practice Manual. Proposals for transmission additions or upgrades must be within or connect to the CAISO Balancing Authority Area or CAISO Controlled Grid and proposals for Economic Planning Studies must be intended to promote competition or economic efficiency of serving Load within the CAISO Balancing Authority Area, but may relate to Congestion relief or transmission capacity expansion outside the CAISO Balancing Authority Area. The following proposals will only be considered in the Transmission Plan if proposed during the Request Window:

- (a) Economic transmission upgrades or additions proposed under Section 24.1.1, except for projects costing less than \$50 million that are identified through Participating TO proposals provided pursuant to the Study Plan;
- (b) Location Constrained Resource Interconnection Facilities under Section 24.1.3 not identified by the CAISO as part of Interconnection Studies performed under the LGIP set forth in Appendix U or Appendix Y;

**24.2.3.4 Information Requested from Interconnected Balancing Authority Areas, Sub-Regional Planning Groups and Electric Utility Regulatory Agencies.**

In accordance with Section 24.8 , the CAISO shall obtain or solicit from interconnected Balancing Authority Areas, regional and sub-regional planning groups within the WECC, the CPUC, the CEC, and Local Regulatory Authorities information required by, or anticipated to be useful to, the CAISO in its performance of the Transmission Planning Process, including, but not limited to (1) long-term transmission system plans; (2) long-term resource plans; (3) generation interconnection process information; (4) Demand Forecasts; and (5) any other data necessary for the development of power flow, short-circuit, and stability cases over the planning horizon of the CAISO Transmission Planning Process.

**24.2.3.5 Obligation to Provide Updated Information.**

If material changes to the information provided under Sections 24.2.3.1 and 24.2.3.2 occur during the annual Transmission Planning Process, the providers of the information must provide notice to the CAISO of the changes.

**24.2.4 Unified Planning Assumptions and Study Plan.**

**24.2.4.1 Additional Projects and Data for Development of the Unified Planning Assumptions and Study Plan.**

The CAISO will develop Unified Planning Assumptions and Study Plan using information and data received during the Request Window and under Section 24.2.3. The CAISO will also use the following in the development of the Unified Planning Assumptions and Study Plan:

- (1) WECC base cases for the relevant planning horizon;
- (2) transmission upgrades and additions approved by the CAISO and scheduled to be energized within the planning horizon;
- (3) Location Constrained Resource Interconnection Facilities conditionally approved under Section 24.1.3.1(a);



- (4) Network Upgrades identified pursuant to Section 25, Appendix U, Appendix Y, or Appendix W relating to the CAISO's Large Generator Interconnection Procedures and Appendix S relating to the CAISO's Small Generator Interconnection Procedures;
- (5) operational solutions validated by the CAISO to address Local Capacity Area Resource requirements;
- (6) regulatory initiatives, as appropriate, including state regulatory agency initiated programs;
- (7) Energy Resource Areas or similar resource areas identified as high priority by the CPUC or CEC; and
- (8) results and analyses from Economic Planning Studies or other assessments that may have identified potentially needed transmission upgrades or additions performed in past CAISO Transmission Planning Process cycles.

**24.2.4.2 General Scope of Unified Planning Assumptions and Study Plan.**

The Unified Planning Assumptions and Study Plan shall, at a minimum, describe:

- (a) the planning data and assumptions to be used, to the maximum extent possible, as a base case for each technical study to be performed in the Transmission Planning Process cycle, including, but not limited, to those related to Demand Forecasts and distribution, generation capacity additions and retirements, and transmission system modifications;
- (b) a list of each technical study to be performed in the Transmission Planning Process cycle and a summary of the technical study's objective or purpose;

- (b) The draft and final Transmission Plan may include, but is not limited to: (1) the results of technical studies performed under the Study Plan; (2) determinations, recommendations, and justifications for the need, according to Section 24.1 for identified transmission upgrades and additions; (3) assessments of transmission upgrades and additions not proposed under Section 24.1 and for which need has not been formally determined by the CAISO Governing Board or management, as applicable, under Section 24.1, but which have been identified by the CAISO as potential solutions to transmission needs studied during the Transmission Planning Process cycle; (4) results of Economic Planning Studies performed during the Transmission Planning Process cycle; (5) an update on the status of transmission upgrades or additions previously approved by the CAISO, including identification of mitigation plans, if necessary, to address any potential delay in the anticipated completion of an approved transmission upgrade or addition; and (6) to the extent available, the results of Interconnection Studies.
- (c) The Transmission Plan may not include the results of certain technical studies performed as part of the Transmission Planning Process cycle identified in the Unified Planning Assumptions and Study Plan that were scheduled for completion after publication of the Transmission Plan for the Transmission Planning Process cycle.

**24.2.5.3 Approval by the CAISO Governing Board.**

The CAISO will present the Transmission Plan to the CAISO Governing Board at the first meeting of the year following the year in which the Transmission Plan is prepared. The Transmission Plan will be considered final once it has been presented to the CAISO Governing Board and will be posted on the

**25 INTERCONNECTION OF GENERATING UNITS AND GENERATING FACILITIES TO THE CAISO CONTROLLED GRID.**

**25.1 Applicability.**

This Section 25 and Appendix U (the Standard Large Generator Interconnection Procedures (LGIP)), Appendix Y (the LGIP for Interconnection Requests in a Queue Cluster Window), Appendix S (the Small Generator Interconnection Procedures (SGIP)), or Appendix W, as applicable, shall apply to:

- (a) each new Generating Unit that seeks to interconnect to the CAISO Controlled Grid;
- (b) each existing Generating Unit connected to the CAISO Controlled Grid that will be modified with a resulting increase in the total capability of the power plant;
- (c) each existing Generating Unit connected to the CAISO Controlled Grid that will be modified without increasing the total capability of the power plant but has changed the electrical characteristics of the power plant such that its re-energization may violate Applicable Reliability Criteria; and
- (d) each existing Qualifying Facility Generating Unit connected to the CAISO Controlled Grid whose total Generation was previously sold to a Participating TO or on-site customer but whose Generation, or any portion thereof, will now be sold in the wholesale market, subject to Section 25.1.2.

**25.1.1** The owner of a Generating Unit described in Section 25.1 (a), (b), or (c), or its designee, shall be an Interconnection Customer required to submit an Interconnection Request and comply with Appendix U (the LGIP), Appendix Y (the LGIP for Interconnection Requests in a Queue Cluster Window), Appendix S (the SGIP), or Appendix W, as applicable, which applicability shall be based on the maximum rated capacity of the new total capability of the power plant, including the capability of all of multiple energy production devices at a site, consistent with Section 4.10 of the SGIP.

**25.1.2** If the owner of a Qualifying Facility described in Section 25.1(d), or its designee, represents that the total capability and electrical characteristics of the Qualifying Facility will be substantially unchanged, then that entity must submit an affidavit to the CAISO and the applicable Participating TO representing that the total capability and electrical characteristics of the Qualifying Facility will remain substantially unchanged. If there is any change to the total capability and electrical characteristics of the Qualifying Facility, however, the affidavit shall include supporting information describing any such changes. The CAISO and the applicable Participating TO shall have the right to verify whether or not the total capability or electrical characteristics of the Qualifying Facility have changed or will change.

**25.1.2.1** If the CAISO and the applicable Participating TO confirm that the electrical characteristics are substantially unchanged, then that request will not be placed into the interconnection queue. However, the owner of the Qualifying Facility, or its designee, will be required to execute a Standard Large Generator Interconnection Agreement in accordance with Section 11 of Appendix U (the LGIP), a Large Generator Interconnection Agreement in accordance with Section 11 of Appendix Y (the LGIP for Interconnection Requests in a Queue Cluster Window), a Small Generator Interconnection Agreement in accordance with Section 3.3.4, 3.4.5, or 3.5.7 and Section 4.8 of the SGIP, or an interconnection agreement in accordance with Appendix W, as applicable.

**25.1.2.2** If the CAISO and the applicable Participating TO cannot confirm that the total capability and electrical characteristics are and will be substantially unchanged, then the owner of the Qualifying Facility, or its designee, shall be an Interconnection Customer required to submit an Interconnection Request and comply with Appendix U (the LGIP), Appendix Y (the LGIP for Interconnection Requests in a Queue Cluster Window), Appendix S (the SGIP), or Appendix W, as applicable.

**25.2 Interconnections to the Distribution System.**

Any proposed interconnection by the owner of a planned Generating Unit, or its designee, to connect that Generating Unit to a Distribution System of a Participating TO will be processed, as applicable, pursuant to the Wholesale Distribution Access Tariff or CPUC Rule 21, or other Local Regulatory Authority requirements, if applicable, of the Participating TO; provided, however, that the owner of the planned Generating Unit, or its designee, shall be required to mitigate any adverse impact on reliability of the CAISO Controlled Grid consistent with Appendix U (the Standard Large Generator Interconnection Procedures) and Appendix Y (the LGIP for Interconnection Requests in a Queue Cluster Window). In addition, each Participating TO will provide to the CAISO a copy of the system impact study used to determine the impact of a planned Generating Unit on the Distribution System and the CAISO Controlled Grid pursuant to a request to interconnect under the applicable Wholesale Distribution Access Tariff or CPUC Rule 21, or other Local Regulatory Authority requirements, if applicable.

**25.3 Maintenance of Encumbrances.**

No new Generating Unit shall adversely affect the ability of the applicable Participating TO to honor its Encumbrances existing as of the time an Interconnection Customer submits its Interconnection Request to the CAISO. The applicable Participating TO, in consultation with the CAISO, shall identify any such adverse effect on its Encumbrances in the Interconnection System Impact Study performed under Section 7 of Appendix U (the LGIP), the Phase I Interconnection Study performed under Section 6 of Appendix Y (the LGIP for Interconnection Requests in a Queue Cluster Window), the system impact study performed under Section 3.4 of the SGIP, or the System Impact Study performed under Section 5.1 of Appendix W, as applicable. To the extent the applicable Participating TO determines that the connection of the new Generating Unit will have an adverse effect on Encumbrances, the Interconnection Customer shall mitigate such adverse effect.

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| <b>Commercial Operation</b>              | The status of a Generating Unit or project phase at a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.  |
| <b>Commercial Operation Date</b>         | The date on which a Generating Unit or project phase at a Generating Facility commences Commercial Operation as agreed to by the applicable Participating TO, the CAISO, and the Interconnection Customer pursuant to Appendix E to the Large Generator Interconnection Agreement, and in accordance with the implementation plan agreed to by the Participating TO and the CAISO for multiple individual Generating Units or project phases at a Generating Facility where an Interconnection Customer intends to establish separate Commercial Operation Dates for those Generating Units or project phases. |
| <b>Commitment Interval</b>               | The fifteen minute period of time for which the CAISO commits units through the Real-Time Unit Commitment process.   |
| <b>Commitment Period</b>                 | The consecutive Time Periods within a Trading Day with an “On” Commitment Status.  |
| <b>Commitment Status</b>                 | The “On” or “Off” state for each unit in each Time Period.   |
| <b>Competitive Constraints Run (CCR)</b> | The first optimization run of the MPM-RRD process through which all pre-designated competitive Constraints are enforced.   |
| <b>Condition 1 RMR Unit</b>              | A resource operating pursuant to Condition 1 of its RMR Contract.  |
| <b>Condition 2 RMR Unit</b>              | A resource operating pursuant to Condition 2 of its RMR Contract.  |
| <b>Congestion</b>                        | A characteristic of the transmission system produced by a binding Constraint to the optimum economic dispatch to meet Demand such that the LMP, exclusive of Marginal Cost of Losses, at different Locations of the transmission system is not equal.  |
| <b>Congestion Charge</b>                 | A charge attributable to the Marginal Cost of Congestion at a given pricing PNode.   |
| <b>Congestion Data Summary</b>           | A report issued by the CAISO on the schedule set forth in the Business Practice Manual that sets forth historic Congestion on the CAISO Controlled Grid.   |
| <b>Congestion Management</b>             | The alleviation of Congestion in accordance with applicable CAISO procedures, the CAISO Tariff, and Good Utility Practice.   |

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| <b>Congestion Revenue Right (CRR)</b>     | A CRR Obligation or CRR Option.   |
| <b>Connected Entity</b>                   | A Participating TO or any party that owns or operates facilities that are electrically interconnected with the CAISO Controlled Grid.   |
| <b>Constrained Output Generator (COG)</b> | A Generating Unit that, due to operational characteristics, can only be dispatched in one of two states: either turned completely Off, or turned On and run at a fixed capacity level.  |
| <b>Constraints</b>                        | Physical and operational limitations on the transfer of electrical power through transmission facilities.   |
| <b>Construction Activities</b>            | Actions by a Participating TO that result in irrevocable financial commitments for the purchase of major electrical equipment or land for Participating TO's Interconnection Facilities or Network Upgrades assigned to the Interconnection Customer that occur after receipt of all appropriate governmental approvals needed for the Participating TO's Interconnection Facilities or Network Upgrades. |
| <b>Contingency</b>                        | A potential Outage that is unplanned, viewed as possible or eventually probable, which is taken into account when considering approval of other requested Outages or while operating the CAISO Balancing Authority Area.  |
| <b>Contingency Flag</b>                   | The daily Bid component that indicates that the Spinning Reserves and Non-Spinning Reserves being offered in the CAISO Market are Contingency Only reserves.  |
| <b>Contingency Only</b>                   | A resource providing Operating Reserve capacity that may be Dispatched by the CAISO only in the event of a Contingency or System Emergency.   |
| <b>Contract Reference Number (CRN)</b>    | The Bid component that indicates the specific contract identification number issued by the CAISO to Scheduling Coordinators transactions under Existing Contracts or TORs.  |

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| <b>Control Area</b>                              | Balancing Authority Area  |
| <b>Control Area Gross Load</b>                   | Balancing Authority Area Gross Load   |
| <b>Control Area Operator</b>                     | Balancing Authority   |
| <b>Converted Rights</b>                          | Those transmission service rights as defined in Section 4.3.1.6.  |
| <b>Core Reliability Services – Demand Charge</b> | The component of the Grid Management Charge that provides for the recovery of the CAISO’s costs of providing a basic, non-scalable level of reliable operation for the CAISO Balancing Authority Area and meeting regional and national reliability requirements. The formula for determining the Core Reliability Services – Demand Charge is set forth in Appendix F, Schedule 1, Part A. |



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| <b>FPA</b>                                  | Parts II and III of the Federal Power Act, 16 U.S.C. § 824 et seq., as they may be amended from time to time.   |
| <b>Frequently Mitigated Unit</b>            | A Generating Unit that is eligible for a Bid Adder pursuant to Section 39.8.  |
| <b>Full Capacity Deliverability Status</b>  | The condition whereby a Large Generating Facility interconnected with the CAISO Controlled Grid, under coincident CAISO Balancing Authority Area peak Demand and a variety of severely stressed system conditions, can deliver the Large Generating Facility's full output to the aggregate of Load on the CAISO Controlled Grid, consistent with the CAISO's Reliability Criteria and procedures and the CAISO On-Peak Deliverability Assessment.  |
| <b>Full Network Model (FNM)</b>             | A computer-based model that includes all CAISO Balancing Authority Area transmission network (Load and Generating Unit) busses, transmission Constraints, and Intertie busses between the CAISO Balancing Authority Area and interconnected Balancing Authority Areas. The FNM models the transmission facilities internal to the CAISO Balancing Authority Area as elements of a looped network and models the CAISO Balancing Authority Area Interties with interconnected Balancing Authority Areas in a radial fashion. |
| <b>GADS</b>                                 | Generating Availability Data System   |
| <b>GDF</b>                                  | Generation Distribution Factor  |
| <b>Generated Bid</b>                        | A post-market Clean Bid generated by the CAISO in accordance with the provisions of Section 40 or other applicable provisions of the CAISO Tariff when a Bid is not submitted by the Scheduling Coordinator and is required for a resource adequacy requirement, an Ancillary Services Award, a RUC Award or a Day-Ahead Schedule.  |
| <b>Generation</b>                           | Energy delivered from a Generating Unit.  |
| <b>Generation Distribution Factor (GDF)</b> | The Bid template component that indicates the proportions of how the Bid is distributed for the resources participating in Physical Scheduling Plants or System Units.  |
| <b>Generating Facility</b>                  | An Interconnection Customer's Generating Unit(s) used for the production of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.   |

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| <b>Group Study</b>                    | The process whereby more than one Interconnection Request is studied together, instead of individually, for the purpose of conducting one or more of the Interconnection Studies or analyses therein.   |
| <b>HASP</b>                           | Hour-Ahead Scheduling Process   |
| <b>HASP Advisory Schedule</b>         | The non-binding output of the HASP as it pertains to the Real-Time Market.  |
| <b>HASP and RTM Congestion Credit</b> | A credit provided to Scheduling Coordinators to offset any HASP and RTM Congestions Charges that would otherwise be applied to the valid and balanced portions of any ETC or TOR Self-Schedules in the HASP and the Real-Time Market as provided in Section 11.5.7.   |
| <b>HASP AS Award</b>                  | Awards for imports of Ancillary Services established through the HASP.  |
| <b>HASP Bid</b>                       | A Bid received in HASP that can be used in the MPM-RRD conducted in HASP, the RTUC, STUC, or the RTD.   |
| <b>HASP Inter-SC Trade Period</b>     | The period commencing at midnight (0000 hours) on the applicable Trading Day and ending at forty-five (45) minutes prior to the start of the applicable Operating Hour, during which time the CAISO will accept from Scheduling Coordinators Inter-SC Trades of Energy for the HASP, Inter-SC Trades of Ancillary Services, and Inter-SC Trades of IFM Load Uplift Obligations. |
| <b>HASP Intertie LMP</b>              | The average of four (4) 15-minute interval LMPs over a Trading Hour.  |
| <b>HASP Intertie Schedule</b>         | The binding output of the HASP including accepted Bids for imported Energy or Ancillary Services and associated LMPs and ASMPs.   |

**Interconnected Balancing Authority Area Operating Agreement (IBAAOA)**

An agreement entered into between the CAISO and a Balancing Authority of a Balancing Authority Area interconnected to the CAISO Balancing Authority Area to govern operation of their interconnected electric systems, a pro forma version of which has been accepted by FERC as a CAISO rate schedule in 87 FERC ¶ 61,231 (1999).

**Interconnected Control Area Operating Agreement (ICAOA)**

Operator of a Control Area interconnected to the CAISO Area to govern operation of their interconnected electric systems, a pro forma version of which has been accepted by FERC as a CAISO rate schedule in 87 FERC ¶ 61,231 (1999).

**Interconnection**

Transmission facilities, other than additions or replacements to existing facilities that: i) connect one system to another system where the facilities emerge from one and only one substation of the two systems and are functionally separate from the CAISO Controlled Grid facilities such that the facilities are, or can be, operated and planned as a single facility; or ii) are identified as radial transmission lines pursuant to contract; or iii) produce Generation at a single point on the CAISO Controlled Grid; provided that such interconnection does not include facilities that, if not owned by the Participating TO, would result in a reduction in the CAISO's Operational Control of the Participating TO's portion of the CAISO Controlled Grid.

**Interconnection Agreement**

A contract between a party requesting interconnection and the Participating TO that owns the transmission facility with which the requesting party wishes to interconnect.

**Interconnection Base  
Case Data**

Data including, but not limited to, base power flow, short circuit and stability databases, underlying Load, Generation, and transmission facility assumptions, Contingency lists, including relevant Remedial Action Schemes, per unit costs, and transmission diagrams used to perform Phase I Interconnection Studies and Phase II Interconnection Studies. Interconnection Base Case Data may include Critical Energy Infrastructure Information (as that term is defined by FERC). The Interconnection Base Case Data shall include transmission facilities approved by the CAISO under Section 24 and Network Upgrades associated with Generation Facilities in (iv) below and Generating Facilities that (i) are directly interconnected to the CAISO Controlled Grid; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending request to interconnect to an Affected System; or (iv) are not interconnected to the CAISO Controlled Grid, but are subject to a fully executed LGIA (or its equivalent predecessor agreement) or for which an unexecuted LGIA (or its equivalent predecessor agreement) has been requested to be filed with FERC. To the maximum extent practicable, the Interconnection Base Case Data shall utilize the Unified Planning Assumptions developed pursuant to Section 24.2.4.

**Interconnection Customer**

Any entity, including a Participating TO or any of its Affiliates or subsidiaries, that proposes to interconnect its Generating Facility with the CAISO Controlled Grid.

**Interconnection  
Customer's  
Interconnection Facilities**

All facilities and equipment, as identified in Appendix A of the Large Generator Interconnection Agreement, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the CAISO Controlled Grid. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities**

The Participating TO's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the CAISO Controlled Grid. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Facilities  
Study**

A study conducted by the Participating TO(s), CAISO, or a third party consultant for the Interconnection Customer to determine a list of facilities (including the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades), the cost of those facilities, and the time required to interconnect the Generating Facility with the CAISO Controlled Grid. The scope of the study is defined in Section 8 of the Standard Large Generator Interconnection Procedures.

**Interconnection Facilities  
Study Agreement**

The form of agreement accepted by FERC and posted on the CAISO Website for conducting the Interconnection Facilities Study.

**Interconnection Feasibility  
Study**

A preliminary evaluation conducted by the Participating TO(s), CAISO, or a third party consultant for the Interconnection Customer of the system impact and cost of interconnecting the Generating Facility to the CAISO Controlled Grid, the scope of which is described in Section 6 of the Standard Large Generator Interconnection Procedures.

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| <b>Interconnection Feasibility Study Agreement</b> | The form of agreement accepted by FERC and posted on the CAISO Website for conducting the Interconnection Feasibility Study.   |
| <b>Interconnection Financial Security</b>          | Any of the financial instruments listed in LGIP Section 9.1 set forth in Appendix Y that are posted by an Interconnection Customer.  |
| <b>Interconnection Handbook</b>                    | A handbook, developed by the Participating TO and posted on the Participating TO's website or otherwise made available by the Participating TO, describing technical and operational requirements for wholesale generators and loads connected to the Participating TO's portion of the CAISO Controlled Grid, as such handbook may be modified or superseded from time to time. Participating TO's standards contained in the Interconnection Handbook shall be deemed consistent with Good Utility Practice and Applicable Reliability Criteria. In the event of a conflict between the terms of the LGIP or SGIP and the terms of the Participating TO's Interconnection Handbook, the terms in the LGIP or SGIP shall apply. |
| <b>Interconnection Request</b>                     | An Interconnection Customer's request, in the form of Appendix 1 to the Large Generator Interconnection Procedures or Attachment 2 to the Small Generator Interconnection Procedures, in accordance with Section 25.1.   |
| <b>Interconnection Service</b>                     | The service provided by the Participating TO and CAISO associated with interconnecting the Interconnection Customer's Generating Facility to the CAISO Controlled Grid and enabling it to receive electric Energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Large Generator Interconnection Agreement, the Participating TO's TO Tariff, and the CAISO Tariff.   |
| <b>Interconnection Study</b>                       | Any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, and the Interconnection Facilities Study described in the Standard Large Generator Interconnection Procedures set forth in Appendix U or the Phase I Interconnection Study and the Phase II Interconnection Study described in the LGIP set forth in Appendix Y.   |

**Interconnection Study  
Cycle**

All requirements, actions, and respective obligations of the CAISO, Participating TO, and Interconnection Customer under the LGIP set forth in Appendix Y applicable to an Interconnection Request submitted in a particular Queue Cluster Window through execution by the parties or submission to FERC by one or more of the parties of an LGIA.

**Interconnection Study  
Deposit**

The cash deposit provided to the CAISO by Interconnection Customers under LGIP Section 3.5.1 set forth in Appendix Y as a requirement of a valid Interconnection Request to be used to offset the cost of the Interconnection Studies as set forth in LGIP Sections 3.5.1.2 and 3.5.1.3 set forth in Appendix Y.

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| <b>Large Generating Facility</b>  | A Generating Facility having a Generating Facility Capacity of more than 20 MW.   |
| <b>Large Generator Interconnection Agreement (LGIA)</b>                 | The form of interconnection agreement applicable to an Interconnection Request pertaining to a Large Generating Facility, a pro forma version of which is set forth in Appendix V or Appendix Z, as applicable.   |
| <b>Large Generator Interconnection Procedures (LGIP)</b>                | The interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that are set forth in Appendix U or Appendix Y, as applicable.  |
| <b>Large Generator Interconnection Study Process Agreement (LGISPA)</b> | The agreement between the CAISO and the Interconnection Customer for conducting the Interconnection Studies for a proposed Large Generating Facility, a pro forma version of which is accepted by FERC, posted on the CAISO Website, and set forth in Appendix Y. |
| <b>LCRIF</b>  | Location Constrained Resource Interconnection Facility  |
| <b>LCRIG</b>  | Location Constrained Resource Interconnection Generator   |
| <b>LDF</b>  | Load Distribution Factor  |
| <b>LFDP</b>   | Load Following Deviation Penalty  |
| <b>LGIA</b>   | Standard Large Generator Interconnection Agreement or Large Generator Interconnection Agreement   |
| <b>LGIP</b>   | Standard Large Generator Interconnection Procedures or Large Generator Interconnection Procedures   |
| <b>LGISPA</b>   | Large Generator Interconnection Study Process Agreement   |
| <b>Line Loss Correction Factor</b>                                      | The line loss correction factor as set forth in the Technical Specifications.   |
| <b>LMP</b>  | Locational Marginal Price   |
| <b>LMPM</b>   | Local Market Power Mitigation   |
| <b>LMP Option</b>   | A method of calculating Default Energy Bids based on Locational Marginal Prices.  |
| <b>Load</b>   | An end-use device of an End-Use Customer that consumes Power. Load should not be confused with Demand, which is the measure of Power that a Load receives or requires.  |
| <b>Load Aggregation Point (LAP)</b>                                     | A set of Pricing Nodes as specified in Section 27.2 that are used for the submission of Bids and Settlement of Demand.  |



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| <b>OBAALSE</b>  | Out-of-Balancing Authority Area Load Serving Entity  |
| <b>Off</b>  | A unit is Off when it is offline or in the process of starting up or shutting down.  |
| <b>Off-Peak Deliverability Assessment</b>               | The technical study performed under LGIP Section 6.3.2.2 set forth in Appendix Y.  |
| <b>Offsetting CRR</b>                                   | One of the pair of new equal and opposite CRRs created and allocated by the CAISO to reflect Load Migration between two LSEs pursuant to the provisions in Section 36.8.5, which is allocated to the Load losing LSE and is opposite in direction to the corresponding CRR previously allocated to that LSE and is denominated in a MW quantity that reflects the net amount of Load Migration between the two LSEs. |
| <b>On</b>   | A unit is On when it is online, synchronized with the grid, and available for Dispatch.  |
| <b>On-Peak Deliverability Assessment</b>                | The technical study performed under LGIP Section 6.3.2.1 set forth in Appendix Y.  |
| <b>On-Site Self-Supply</b>                              | Energy from a Generating Unit that is deemed to have self-supplied all or a portion of its associated Station Power Load without use of the CAISO Controlled Grid during the Netting Period.   |
| <b>Open Access Same-Time Information System (OASIS)</b> | The electronic posting system for transmission access data that the CAISO maintains on the CAISO Website that allows all Market Participants to view the data simultaneously.  |
| <b>Operating Day</b>                                    | The day when the Real-Time Market runs and Energy is supplied to Load.   |
| <b>Operating Hour</b>                                   | The hour during the day when the Real-Time Market runs and Energy is supplied to Load.   |
| <b>Operating Procedures</b>                             | Procedures governing the operation of the CAISO Controlled Grid as the CAISO may from time to time develop, and/or procedures that Participating TOs currently employ which the CAISO adopts for use.  |
| <b>Operating Reserve</b>                                | The combination of Spinning and Non-Spinning Reserve required to meet WECC and NERC Reliability Standards and requirements for reliable operation of the CAISO Balancing Authority Area.   |

**Participating TO's  
Interconnection Facilities**

All facilities and equipment owned, controlled, or operated by the Participating TO from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the Large Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Participating TO's Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Path 15 Upgrade**

The upgraded transmission facilities on Path 15 that have been turned over to CAISO Operational Control.

**Payment Advice**

A document published as a result of an invoicing run pursuant to the CAISO Payments Calendar in which a Business Associate's current net financial obligation is a negative Settlement Amount.

**Payment Date**

The date by which invoiced amounts are to be paid under the terms of the CAISO Tariff.

**PGA**

Participating Generator Agreement

**Phase I Interconnection  
Study**

The engineering study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), that evaluates the impact of the proposed interconnection on the safety and reliability of the CAISO Controlled Grid and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility(ies) were interconnected without identified project modifications or system modifications, as provided in the On-Peak Deliverability Assessment or Off-Peak Deliverability Assessment, and other potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Large Generator Interconnection Procedures set forth in Appendix Y. The study will also identify the approximate total costs, based on per unit costs, of mitigating these impacts, along with an equitable allocation of those costs to Interconnection Customers for their individual Generating Facilities.

**Phase II Interconnection Study**

An engineering and operational study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), to determine the Point of Interconnection and a list of facilities (including the Participating TO's Interconnection Facilities, Network Upgrades, Distribution Upgrades, and Stand Alone Network Upgrades), the cost of those facilities, and the time required to interconnect the Generating Facility(ies) with the CAISO Controlled Grid.

**Physical Scheduling Plant**

A group of two or more related Generating Units, each of which is individually capable of producing Energy, but which either by physical necessity or operational design must be operated as if they were a single Generating Unit and any Generating Unit or Units containing related multiple generating components which meet one or more of the following criteria: i) multiple generating components are related by a common flow of fuel which cannot be interrupted without a substantial loss of efficiency of the combined output of all components; ii) the Energy production from one component necessarily causes Energy production from other components; iii) the operational arrangement of related multiple generating components determines the overall physical efficiency of the combined output of all components; iv) the level of coordination required to schedule individual generating components would cause the CAISO to incur scheduling costs far in excess of the benefits of having scheduled such individual components separately; or v) metered output is available only for the combined output of related multiple generating components and separate generating component metering is either impractical or economically inefficient.

**Physical Trade**

An Inter-SC Trade of Energy at an individual PNode of Generating Units that is submitted to the CAISO for Settlement through the CAISO Market and is subject to physical validation.

**PIR Export Percentage**

The PIR Export Percentage will be calculated for each Participating Intermittent Resource as the ratio of the Participating Intermittent Resource's PMax in the CAISO Master File minus the MW subject to an exemption under Section 5.3.2 of the EIRP in Appendix Q on a MW basis to the Participating Intermittent Resource's PMax in the CAISO Master File.

|   |   |
|---|---|
| <b>PLA</b>  | Participating Load Agreement  |
| <b>Planning Standards Committee</b>                                       | The committee appointed under Section 24.2.1.   |
| <b>PMax</b>   | The maximum normal capability of the Generating Unit. PMax should not be confused as an emergency rating of the Generating Unit.  |
| <b>PMin</b>   | The minimum normal capability of the Generating Unit.   |
| <b>PMS</b>  | Power Management System   |
| <b>PNode</b>  | Pricing Node  |
| <b>PNP</b>  | Priority Nomination Process   |
| <b>PNP Eligible Quantity</b>  | The maximum MW quantity of CRRs an LSE is eligible to nominate in the Priority Nomination Process of the CRR Allocation.  |
| <b>POD</b>  | Point(s) of Delivery  |
| <b>Point of Change of Ownership</b>                                       | The point, as set forth in Appendix A to the Large Generator Interconnection Agreement, where the Interconnection Customer's Interconnection Facilities connect to the Participating TO's Interconnection Facilities.   |
| <b>Point of Demarcation</b>   | For a Net Scheduled QF, the point (1) where the electrical conductors from the Net Scheduled QF contact an electric utility system or the CAISO Controlled Grid; or (2) if dedicated utility distribution facilities are employed, where the dedicated facilities contact the electric utility system or the CAISO Controlled Grid. |
| <b>Point of Interconnection</b>   | The point, as set forth in Appendix A to the Large Generator Interconnection Agreement or Attachment 3 to the Small Generator Interconnection Agreement, where the Interconnection Facilities connect to the CAISO Controlled Grid.   |
| <b>Point(s) of Delivery or Withdrawal (POD or Point(s) of Withdrawal)</b> | Point(s) within the CAISO Balancing Authority Area where Energy and Ancillary Services are made available to a receiving party under this CAISO Tariff.   |

|  |  |
|--|--|
| <b>Point(s) of Receipt or Injection (POR or Point(s) or Injection)</b> | Point(s) within the CAISO Balancing Authority Area where Energy and Ancillary Services are made available by a delivering party under this CAISO Tariff.   |
| <b>Point-to-Point CRR</b>  | A CRR Option or CRR Obligation with a single CRR Source to a single CRR Sink.  |
| <b>POR</b>   | Point(s) of Receipt  |
| <b>Power</b>   | The electrical work produced by a Generating Unit that is absorbed by the resistive components of Load or other network components, measured in units of watts or standard multiples thereof, e.g., 1,000 Watt = 1 kW; 1,000 kW = 1 MW, etc.   |
| <b>Power Flow Model</b>  | A network model used by the CAISO to model the voltages, power injections and power flows on the CAISO Controlled Grid and adjacent Balancing Authority Areas.   |
| <b>Power Management System (PMS)</b>                                   | The CAISO computer control system used to monitor the real-time performance of the various elements of the CAISO Controlled Grid, control Generation, and perform operational power flow studies.  |
| <b>Power System Stabilizers (PSS)</b>                                  | An electronic control system applied on a Generating Unit that helps to damp out dynamic oscillations on a power system. The Power System Stabilizers senses Generator variables, such as voltage, current and shaft speed, processes this information and sends control signals to the Generator voltage regulator.   |
| <b>Power Transfer Distribution Factor (PTDF)</b>                       | The percentage of a power transfer that flows on a transmission facility as a result of the injection of power at a specific bus and the withdrawal of power at another bus or a Reference Bus.  |
| <b>Pre-Construction Activities</b>                                     | Actions by a Participating TO, other than those required by an Engineering and Procurement Agreement under LGIP Section 10 in Appendix Y, undertaken prior to Construction Activities in order to prepare for the construction of Participating TO's Interconnection Facilities or Network Upgrades assigned to the Interconnection Customer, including, but not limited to, preliminary engineering, permitting activities, environmental analysis, or other activities specifically needed to obtain governmental approvals for the Participating TO's Interconnection Facilities or Network Upgrades. |

**Reliability Network  
Upgrades**

The transmission facilities at or beyond the Point of Interconnection identified in the Interconnection Studies as necessary to interconnect one or more Large Generating Facility(ies) safely and reliably to the CAISO Controlled Grid, which would not have been necessary but for the interconnection of one or more Large Generating Facility(ies), including Network Upgrades necessary to remedy short circuit or stability problems, or thermal overloads. Reliability Network Upgrades shall only be deemed necessary for thermal overloads, occurring under any system condition, where such thermal overloads cannot be adequately mitigated through Congestion Management, Operating Procedures, or Special Protection Systems based on the characteristics of the Large Generating Facilities included in the Interconnection Studies, limitations on market models, systems, or information, or other factors specifically identified in the Interconnection Studies. Reliability Network Upgrades also include, consistent with WECC practice, the facilities necessary to mitigate any adverse impact the Large Generating Facility's interconnection may have on a path's WECC rating.

**Reliability Requirement  
Determination (RRD)**

The reliability process conducted by the CAISO during the DAM, prior to the IFM, and in the HASP, prior to the RTUC, to determine whether unit(s) subject to a contract with the CAISO to provide local reliability services, which includes Reliability Must-Run and any successor instrument determined are necessary to meet local reliability needs for the CAISO Balancing Authority Area.

**Reliability Services Costs**

The costs associated with services provided by the CAISO: 1) that are deemed by the CAISO as necessary to maintain reliable electric service in the CAISO Balancing Authority Area; and 2) whose costs are billed by the CAISO to the Participating TO pursuant to the CAISO Tariff. Reliability Services Costs include costs charged by the CAISO to a Participating TO associated with service provided under an Reliability Must-Run Contract, Exceptional Dispatches and Minimum Load Costs associated with units committed for local reliability requirements.

**Responsible Participating Transmission Owner (or Responsible Participating TO or Responsible PTO)**

The party providing transmission service under an Existing Contract listed in Appendix A of a Responsible Participating Transmission Owner Agreement and that is the Scheduling Coordinator for each Existing Right holder listed in Appendix A of that RPTOA, unless that Scheduling Coordinator responsibility is transferred pursuant to the provisions of the RPTOA.

**Responsible Participating Transmission Owner Agreement (RPTOA)**

An agreement between the CAISO and a Responsible Participating Transmission Owner, a pro forma version of which has been accepted by FERC as a CAISO rate schedule in 88 FERC ¶ 61,077.

**Responsible Utility**

The utility which is a party to the Transmission Control Agreement in whose PTO Service Territory the Reliability Must-Run Unit is located or whose PTO Service Territory is contiguous to the PTO Service Territory in which a Reliability Must-Run Unit owned by an entity outside of the CAISO Controlled Grid is located.

**Responsible Utility Facility Trust Account**

A segregated commercial bank account under the Facility Trust Account containing funds held in trust for the Responsible Utility under an RMR Contract.

**Results Meeting**

The meeting among the CAISO, the applicable Participating TO(s), the Interconnection Customer, and, if applicable, other Affected System Operators to discuss the results of the Phase I Interconnection Study as set forth in LGIP Section 6 set forth in Appendix Y.

**Revenue Meter Data Acquisition and Processing System (RMDAPS)**

A collective name for the set of CAISO systems used to collect, validate, edit and report on Revenue Quality Meter Data.

**Revenue Quality Meter Data**

Meter data meeting the standards and requirements established and maintained by the CAISO.

**Revenue Requirement**

The revenue level required by a utility to cover expenses made on an investment, while earning a specified rate of return on the investment.

**Revised Adjusted RMR Invoice**

The monthly invoice issued by the Reliability Must-Run Owner to the CAISO pursuant to the Reliability Must-Run Contract reflecting any appropriate revisions to the Adjusted Reliability Must-Run Invoice based on the CAISO's validation and actual data for the billing month.

|  |  |
|--|--|
| <b>Shut-Down</b>                           | A Commitment Status transition from On to Off.   |
| <b>Shut-Down Cost</b>                      | The Bid Component submitted by the Scheduling Coordinator indicating a single price at which the resource is willing to Shut-Down.   |
| <b>Shut-Down Instruction</b>               | An instruction issued by the CAISO to a resource to Shut-Down.   |
| <b>Simultaneous Feasibility Test (SFT)</b> | The process that the CAISO will conduct to ensure that allocated and auction CRRs do not exceed relevant transmission system Constraints as described in Section 36.4.2 and further described in the Business Practice Manuals.  |
| <b>Site Control</b>                        | Documentation reasonably demonstrating: (1) ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Generating Facility; (2) an option to purchase or acquire a leasehold site for such purpose; or (3) an exclusivity or other business relationship between Interconnection Customer and the entity having the right to sell, lease or grant Interconnection Customer the right to possess or occupy a site for such purpose.  |
| <b>Site Exclusivity</b>                    | Documentation reasonably demonstrating:<br>(1) For private land:<br>(a) Ownership of, a leasehold interest in, or a right to develop property upon which the Generating Facility will be located consisting of a minimum of 50% of the acreage reasonably necessary to accommodate the Generating Facility; or<br>(b) an option to purchase or acquire a leasehold interest in property upon which the Generating Facility will be located consisting of a minimum of 50% of the acreage reasonably necessary to accommodate the Generating Facility.<br>(2) For public land, including that controlled or managed by any federal, state or local agency, a final, non-appealable permit, license, or other right to use the property for the purpose of generating electric power and in acreage reasonably necessary to accommodate the Generating Facility, which exclusive right to use public land under the management of the federal Bureau of Land Management shall be in a form specified by the Bureau of Land Management. |



**Site Exclusivity Deposit**

The cash deposit provided to the CAISO by Interconnection Customers under LGIP Section 3.5.1 set forth in Appendix Y as an option in lieu of demonstrating Site Exclusivity for a valid Interconnection Request and treated in accordance with LGIP Section 3.5.1.4 set forth in Appendix Y.

**SLIC**

Scheduling and Logging system for the CAISO

**Small Generating Facility**

A Generating Facility that has a Generating Facility Capacity of no more than 20 MW.

**Small Utility Distribution Company (SUDC)**

An entity that owns a Distribution System that is capable of transmitting or delivery of Energy to and/or from the CAISO Controlled Grid that provides retail electric service to End-Use Customers, and has the following characteristics:

1. Annual peak Demand is 25 MW or less;
2. The Distribution System is not in a local reliability area defined by the CAISO; and
3. Good Utility Practice was used in designing all substation facilities that are owned or operated by the entity and interconnected to the CAISO Controlled Grid, and none of those substations have transmission circuit breakers.

**Stand Alone Network Upgrades**

Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the CAISO Controlled Grid or Affected Systems during their construction. The Participating TO, the CAISO, and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Large Generator Interconnection Agreement.

**Standard Large Generator Interconnection Agreement (LGIA)**

The form of interconnection agreement applicable to an Interconnection Request pertaining to a Large Generating Facility, a pro forma version of which is set forth in Appendix V.

**Standard Large Generator Interconnection Procedures (LGIP)**

The interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that is set forth in Appendix U.

**Standard Ramp (-ing)**

A ramp calculated from two consecutive Day-Ahead Schedules that results in a straight trajectory between 10 minutes before the start of a Trading Hour to 10 minutes after the start of the Trading Hour.

**Standard Ramping Energy**

Imbalance Energy produced or consumed in the first two and the last two Dispatch Intervals due to hourly schedule changes. Standard Ramping Energy is a schedule deviation along a linear symmetric twenty (20)-minute ramp (Standard Ramp) across hourly boundaries. Standard Ramping Energy is always present when there is an hourly schedule change, including resource Start-Ups and Shut-Downs. Standard Ramping Energy does not apply to Non-Dynamic System Resources (including Resource-Specific System Resources) and is not subject to Settlement as described in Section 11.5.1.

- 1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary arrangements (including scheduling) for delivery of electricity in accordance with the CAISO Tariff.
- 1.4 Nothing in this Agreement is intended to affect any other agreement between or among the Parties.
- 1.5 Responsibilities of the Parties
- 1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice. The Parties shall use the Large Generator Interconnection Agreement (CAISO Tariff Appendix V or Appendix Z, as applicable) to interpret the responsibilities of the Parties under this Agreement.
- 1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.
- 1.5.3 The Participating TO shall construct, operate, and maintain its Interconnection Facilities and Upgrades in accordance with this Agreement, and with Good Utility Practice. The CAISO and the Participating TO shall cause the Participating TO's Transmission System to be operated and controlled in a safe and reliable manner and in accordance with this Agreement.
- 1.5.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Participating TO and any Affected Systems. The Interconnection Customer shall comply with the Participating TO's Interconnection Handbook. In the event of a conflict between the terms of this Agreement and the terms of the Participating TO's Interconnection Handbook, the terms in this Agreement shall govern.
- 1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Participating TO and the Interconnection Customer, as appropriate, shall provide Interconnection Facilities that adequately protect the CAISO Controlled Grid, the Participating TO's electric system, the Participating TO's personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

## **Section 1. Objectives and Definitions.**

### **1.1 Objectives**

The objective of this LGIP is to implement FERC's Order No. 2003 setting forth the requirements for Large Generating Facility interconnections to the CAISO Controlled Grid. This LGIP applies to Interconnection Requests not assigned to a Queue Cluster Window pursuant to the terms of this CAISO Tariff for the performance of its Interconnection Studies.

### **1.2 Definitions.**

#### **1.2.1 Master Definitions Supplement.**

Unless the context otherwise requires, any word or expression defined in the Master Definitions Supplement, Appendix A to the CAISO Tariff, shall have the same meaning where used in this LGIP. A reference to a Section or an Appendix is a reference to a Section or an Appendix of the CAISO Tariff. References to LGIP are to this Appendix U.

#### **1.2.2 Special Definitions for this LGIP.**

In this LGIP, the following words and expressions shall have the meanings set opposite them:

**"Confidential Information"** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, subject to Section 13.1 of this LGIP.

**"Dispute Resolution"** shall mean the procedure set forth in this LGIP for resolution of a dispute between the Parties.

**"Force Majeure"** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**"Governmental Authority"** shall mean any federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, CAISO, or Participating TO, or any Affiliate thereof.

**"Party" or "Parties"** shall mean the CAISO, Participating TO(s), Interconnection Customer or the applicable combination of the above.

**“Reasonable Efforts”** shall mean, with respect to an action required to be attempted or taken by a Party under the Standard Large Generator Interconnection Procedures, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**“Roles and Responsibilities Agreement”** shall mean the Agreement for the Allocation of Responsibilities with Regard to Large Generator Interconnection Procedures and Interconnection Study Agreements, a pro forma version of which is attached to this LGIP.

## **Section 2. Scope and Application.**

### **2.1 Application of Standard Large Generator Interconnection Procedures.**

Sections 2 through 13 of this LGIP apply to processing an Interconnection Request pertaining to a Large Generating Facility that is not assigned to a Queue Cluster Window pursuant to the terms of this CAISO Tariff for the performance of its Interconnection Studies.

### **2.2 Comparability.**

The CAISO shall receive, process and analyze Interconnection Requests in a timely manner as set forth in this LGIP. The CAISO will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers, whether the Generating Facilities are owned by a Participating TO, its subsidiaries, or Affiliates or others.

### **2.3 Base Case Data.**

The CAISO and/or the applicable Participating TO(s) shall provide base power flow, short circuit and stability databases, including all underlying assumptions, and contingency list upon request subject to applicable confidentiality provisions in LGIP Section 13.1. The applicable Participating TO(s) and the CAISO are permitted to require that the Interconnection Customer sign a confidentiality agreement before the release of commercially sensitive information or Critical Energy Infrastructure Information (as that term is defined by FERC) in the Base Case data. Such Base Cases shall include (i) generation projects and (ii) transmission projects, including merchant transmission projects that are proposed for the transmission system for which a transmission expansion plan has been submitted and approved by the applicable authority.

### **2.4 No Applicability to Transmission Service.**

Nothing in this LGIP shall constitute a request for transmission service or confer upon an Interconnection Customer any right to receive transmission service.

## **Section 3. Interconnection Requests.**

### **3.1 General.**

Pursuant to CAISO Tariff Section 25.1, an Interconnection Customer shall submit to the CAISO an Interconnection Request in the form of Appendix 1 to this LGIP and a refundable deposit of \$10,000. The CAISO will forward a copy of the Interconnection Request to the applicable Participating TO within one (1) Business Day of receipt. The CAISO shall apply the deposit toward the cost of an Interconnection Feasibility Study.

**Section 11. Standard Large Generator Interconnection Agreement (LGIA).**

**11.1 Tender.**

**11.1.1** Within thirty (30) calendar days after the CAISO receives the Interconnection Customer's written comments, or notification of no comments, to the draft Interconnection Facilities Study report, the applicable Participating TO(s) and the CAISO shall tender a draft LGIA, together with draft appendices. The draft LGIA shall be in the form of the FERC-approved standard form LGIA set forth in CAISO Tariff Appendix V. The Interconnection Customer shall provide written comments, or notification of no comments, to the draft appendices to the applicable Participating TO(s) and the CAISO within (30) calendar days of receipt.

**11.1.2** Consistent with Sections 3.4.4 and 11.1.1 of this LGIP, when the transmission system of a Participating TO, in which the Point of Interconnection is not located, is affected, such Participating TO shall tender a separate agreement, in the form of the LGIA, as appropriately modified.

**11.2 Negotiation.**

Notwithstanding LGIP Section 11.1, at the request of the Interconnection Customer, the applicable Participating TO(s) and CAISO shall begin negotiations with the Interconnection Customer concerning the appendices to the LGIA at any time after the Interconnection Customer executes the Interconnection Facilities Study Agreement. The applicable Participating TO(s) and CAISO and the Interconnection Customer shall negotiate concerning any disputed provisions of the appendices to the draft LGIA for not more than sixty (60) calendar days after tender of the final Interconnection Facilities Study report. If the Interconnection Customer determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the draft LGIA pursuant to LGIP Section 11.1 and request submission of the unexecuted LGIA with FERC or initiate Dispute Resolution procedures pursuant to LGIP Section 13.5. If the Interconnection Customer requests termination of the negotiations, but within ninety (90) calendar days after issuance of the final Interconnection Facilities Study report fails to request either the filing of the unexecuted LGIA or initiate Dispute Resolution, it shall be deemed to have withdrawn its Interconnection Request. Unless otherwise agreed by the Parties, if the Interconnection Customer has not executed and returned the LGIA, requested filing of an unexecuted LGIA, or initiated Dispute Resolution procedures pursuant to LGIP Section 13.5 within ninety (90) calendar days after issuance of the final Interconnection Facilities Study report, it shall be deemed to have withdrawn its Interconnection Request. The applicable Participating TO(s) and CAISO shall provide to the Interconnection Customer a final LGIA within fifteen (15) Business Days after the completion of the negotiation process.

**11.3 Execution and Filing.**

At the time that the Interconnection Customer either returns the executed LGIA or requests the filing of an unexecuted LGIA as specified below, the Interconnection Customer shall provide the applicable Participating TO(s) and CAISO (A) reasonable evidence of continued Site Control or (B) posting to the applicable Participating TO(s) of \$250,000, non-refundable additional security, which shall be applied toward future construction costs. At the same time, the Interconnection Customer also shall provide

**Standard Large Generator Interconnection Procedures (LGIP)** shall mean the CAISO protocol that sets forth the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that is included in CAISO Tariff Appendix U.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, that protects (1) the Participating TO's Transmission System, Participating TO's Interconnection Facilities, CAISO Controlled Grid, and Affected Systems from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the CAISO Controlled Grid, Participating TO's Interconnection Facilities, and Affected Systems or on other delivery systems or other generating systems to which the CAISO Controlled Grid is directly connected.

**Transmission Control Agreement** shall mean CAISO FERC Electric Tariff No. 7.

**Trial Operation** shall mean the period during which the Interconnection Customer is engaged in on-site test operations and commissioning of an Electric Generating Unit prior to Commercial Operation.

## ARTICLE 2. EFFECTIVE DATE, TERM AND TERMINATION

- 2.1 Effective Date.** This LGIA shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by FERC. The CAISO and Participating TO shall promptly file this LGIA with FERC upon execution in accordance with Article 3.1, if required.
- 2.2 Term of Agreement.** Subject to the provisions of Article 2.3, this LGIA shall remain in effect for a period of \_\_\_\_ years from the Effective Date (Term Specified in Individual Agreements to be ten (10) years or such other longer period as the Interconnection Customer may request) and shall be automatically renewed for each successive one-year period thereafter.
- 2.3 Termination Procedures.**
- 2.3.1 Written Notice.** This LGIA may be terminated by the Interconnection Customer after giving the CAISO and the Participating TO ninety (90) Calendar Days advance written notice, or by the CAISO and the Participating TO notifying FERC after the Generating Facility permanently ceases Commercial Operation.
- 2.3.2 Default.** A Party may terminate this LGIA in accordance with Article 17.
- 2.3.3 Suspension of Work.** This LGIA may be deemed terminated in accordance with Article 5.16.
- 2.3.4** Notwithstanding Articles 2.3.1, 2.3.2, and 2.3.3, no termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this LGIA, which notice has been accepted for filing by FERC.

**Attachment B2 – Clean Sheets**  
**Generation Interconnection Process Reform Amendment Filing**

**4<sup>th</sup> Replacement MRTU Tariff**



**CAISO TARIFF APPENDIX Y**

**Large Generator Interconnection Procedures (LGIP)  
for Interconnection Requests in a Queue Cluster Window**

**Large Generator  
Interconnection Procedures (LGIP)**

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## **Section 1 Objectives and Definitions.**

### **1.1 Objectives and Applicability.**

The objective of this LGIP is to implement the requirements for Large Generating Facility interconnections to the CAISO Controlled Grid. This LGIP applies to Interconnection Requests assigned to a Queue Cluster Window pursuant to the terms of this CAISO Tariff for the performance of its Interconnection Studies.

### **1.2 Definitions.**

#### **1.2.1 Master Definitions Supplement.**

Unless the context otherwise requires, any word or expression defined in the Master Definitions Supplement, Appendix A to the CAISO Tariff, shall have the same meaning where used in this LGIP. References to LGIP are to this Appendix Y.

#### **1.2.2 Special Definitions for this LGIP.**

In this LGIP, the following words and expressions shall have the meanings set opposite them:

**“Confidential Information”** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, subject to Section 13.1 of this LGIP.

**“Dispute Resolution”** shall mean the procedure set forth in this LGIP for resolution of a dispute between the Parties.

**“Force Majeure”** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**“Governmental Authority”** shall mean any federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, CAISO, or Participating TO, or any Affiliate thereof.

**“Party” or “Parties”** shall mean the CAISO, Participating TO(s), Interconnection Customer or the applicable combination of the above.

**“Reasonable Efforts”** shall mean, with respect to an action required to be attempted or taken by a Party under the Large Generator Interconnection Procedures, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**“Roles and Responsibilities Agreement”** shall mean the Agreement for the Allocation of Responsibilities with Regard to Large Generator Interconnection Procedures and Interconnection Study Agreements, a *pro forma* version of which is attached to this LGIP.

## **Section 2      Scope and Application.**

### **2.1      Application of Large Generator Interconnection Procedures.**

Sections 2 through 13 of this LGIP apply to processing an Interconnection Request pertaining to a Generating Facility assigned to a Queue Cluster Window pursuant to the terms of this CAISO Tariff for the performance of its Interconnection Studies. Appendix 2 of this LGIP sets forth exceptions to the provisions of this LGIP that apply to processing an Interconnection Request pertaining to a Generating Facility that meets the criteria set forth in LGIP Appendix 2.

### **2.2      Comparability.**

The CAISO shall receive, process, and analyze Interconnection Requests in a timely manner as set forth in this LGIP. The CAISO will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers as set forth in this LGIP, whether the Generating Facilities are owned by a Participating TO, its subsidiaries, or Affiliates or others.

### **2.3      Interconnection Base Case Data.**

For each Interconnection Study Cycle, the CAISO, in coordination with applicable Participating TO(s), shall publish updated Interconnection Base Case Data, including, as applicable, separate Interconnection Base Case Data for each Group Study to reflect system conditions particular to the Group Study, to a secured section of the CAISO Website: (1) prior to the Phase I Interconnection Study with the Generation reflected in valid Interconnection Requests submitted in the Queue Cluster Window for the Interconnection Study Cycle; (2) after the Phase I Interconnection Study with the Generation reflected in valid Interconnection Requests submitted in the Queue Cluster Window for the Interconnection Study Cycle, and the identified preliminary transmission upgrades or additions, (3) prior to the Phase II Interconnection Study, including all remaining Generation from the Phase I Interconnection Study for the Interconnection Study Cycle; and (4) after the Phase II Interconnection Study, including all remaining Generation from the applicable Phase I Interconnection Study and the identified transmission upgrades and additions for the Interconnection Study Cycle.

Interconnection Base Case Data shall not include information subject to the confidentiality provisions in LGIP Section 13.1.

The CAISO shall require current and former Interconnection Customers, Market Participants, and electric utility regulatory agencies within California to sign a CAISO confidentiality agreement and, where the current or former Interconnection Customer or Market Participant is not a member of WECC, or its successor, an appropriate form of agreement with WECC, or its successor, as necessary. All other entities or persons seeking Interconnection Base Case Data must satisfy the foregoing requirements as well all requirements under 18 C.F.R. Section 388.113 for obtaining the release of Critical Energy Infrastructure Information (as that term is defined by FERC).

## **2.4 Interconnection Service and Studies.**

### **2.4.1 No Applicability to Transmission Service.**

Nothing in this LGIP shall constitute a request for transmission service or confer upon an Interconnection Customer any right to receive transmission service.

### **2.4.2 The Product.**

Interconnection Service allows the Interconnection Customer to connect the Large Generating Facility to the CAISO Controlled Grid and be eligible to deliver the Large Generating Facility's output using the available capacity of the CAISO Controlled Grid. Interconnection Service does not in and of itself convey any right to deliver electricity to any specific customer or point of delivery or rights to any specific MW of available capacity on the CAISO Controlled Grid.

### **2.4.3 The Interconnection Studies.**

The Interconnection Studies consist of a Phase I Interconnection Study and a Phase II Interconnection Study, which will include, but not be limited to, short circuit/fault duty, steady state (thermal and voltage) and stability analyses. The Interconnection Studies will identify direct Interconnection Facilities and required Reliability Network Upgrades necessary to mitigate thermal overloads and voltage violations, and address short circuit, stability, and reliability issues associated with the requested Interconnection Service.

The Interconnection Studies will also identify Delivery Network Upgrades to allow the full output of a Large Generating Facility selecting Full Capacity Deliverability Status, and, as applicable, the maximum allowed output of the interconnecting Large Generating Facility without one or more Delivery Network Upgrades in accordance with the On-Peak Deliverability Assessment and Off-Peak Deliverability Assessment set forth in LGIP Section 6.3.2.

## **Section 3 Interconnection Requests.**

### **3.1 General.**

Pursuant to CAISO Tariff Section 25.1, an Interconnection Customer shall submit to the CAISO an Interconnection Request in the form of Appendix 1 to this LGIP. The CAISO will forward a copy of the Interconnection Request to the applicable Participating TO within three (3) Business Days of receipt.



The Interconnection Customer shall submit a separate Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. The Interconnection Customer must submit a deposit with each Interconnection Request even when more than one request is submitted for a single site. An Interconnection Request to evaluate one site at two different voltage levels shall be treated as two Interconnection Requests.

### 3.2 Roles and Responsibilities.

- (a) Each Interconnection Request will be subject to the direction and oversight of the CAISO. The CAISO will conduct or cause to be performed the required Interconnection Studies and any additional studies the CAISO determines to be reasonably necessary, and will direct the applicable Participating TO to perform portions of studies where the Participating TO has specific and non-transferable expertise or data and can conduct the studies more efficiently and cost effectively than the CAISO. The CAISO will coordinate with Affected System Operators in accordance with LGIP Section 3.7.
- (b) The CAISO will complete or cause to be completed all studies as required within the timelines provided in this LGIP. Any portion of the studies performed at the direction of the CAISO by the Participating TOs or by a third party shall also be completed within timelines provided in this LGIP.
- (c) The CAISO has established a *pro forma* Roles and Responsibilities Agreement, attached hereto as Appendix 4 and incorporated herein by reference, for execution by the CAISO and the applicable Participating TOs.
- (d) Each Interconnection Customer shall pay the actual costs of all Interconnection Studies, and any additional studies the CAISO determines to be reasonably necessary in response to the Interconnection Request. The CAISO shall reimburse the Participating TO for the actual cost of any portion of all Interconnection Studies that such Participating TO performs at the direction of the CAISO.

### 3.3 Queue Cluster Windows.

Interconnection Requests must be submitted during a Queue Cluster Window. Separate Queue Cluster Windows shall be established as follows: (i) as provided for in LGIP Appendix 2, Section 1.1; (ii) opening on June 2, 2008 and closing on July 31, 2009; (iii) opening on October 1, 2009 and closing on January 31, 2010; and (iv) thereafter, each calendar year shall have two Queue Cluster Windows with opening and closing dates as set forth in the Business Practice Manual.

Any changes to the Queue Cluster Window interval and opening or closing dates set forth in the Business Practice Manual shall be made in accordance with CAISO Tariff Section 22.11.

**3.4 [NOT USED]**

**3.5 Processing of Interconnection Request.**

**3.5.1 Initiating an Interconnection Request.**

To initiate an Interconnection Request, except as set forth in LGIP Section 3.5.1.1, the Interconnection Customer must submit during a Queue Cluster Window all of the following: (i) a \$250,000 Interconnection Study Deposit, (ii) a completed application in the form of LGIP Appendix 1, including requested deliverability status, preferred Point of Interconnection and voltage level, and all other required technical data, and (iii) demonstration of Site Exclusivity or a posting of a Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity, at a minimum, must be through the Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility.

**3.5.1.1 Initiating an Interconnection Request for Certain Small and Existing Generating Facilities.**

An Interconnection Customer submitting an Interconnection Request relating to (a) a Small Generating Facility seeking a Deliverability Assessment or (b) a Generating Facility, subject to the LGIP in accordance with CAISO Tariff Section 25.1.1, that has achieved Commercial Operation prior to the date of the Interconnection Request, and is seeking to increase the capacity of the Generating Facility by less than 20 MW, must submit during a Queue Cluster Window all of the following: (i) a \$100,000 Interconnection Study Deposit, (ii) a completed application in the form of LGIP Appendix 1, including requested deliverability status, preferred Point of Interconnection and voltage level, and all other required technical data, and (iii) demonstration of Site Exclusivity, which for a Generation Facility under (b) above shall be Site Exclusivity sufficient to accommodate the added capacity, or a posting of an additional Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity, at a minimum, must be through the Commercial Operation Date of the new Generating Facility or increase in capacity of the existing Generating Facility.

**3.5.1.2 Use of Interconnection Study Deposit.**

The CAISO shall deposit all Interconnection Study Deposits in an interest bearing account at a bank or financial institution designated by the CAISO. The Interconnection Study Deposit shall be applied to pay for prudent costs incurred by the CAISO, the Participating TOs, or third parties at the direction of the CAISO or Participating TOs, as applicable, to perform and administer the Interconnection Studies.

The Interconnection Study Deposits shall be refundable as follows:

- (a) Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under LGIP Section 3.8 on or before thirty (30) calendar days following the Scoping Meeting, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceed the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.
- (b) Should an Interconnection Request made under LGIP Section 3.5.1 be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under LGIP Section 3.8 more than thirty (30) calendar days after the Scoping Meeting, but on or before thirty (30) calendar days following the Results Meeting for the Phase I Interconnection Study, the CAISO shall refund to the Interconnection Customer the difference between (i) the Interconnection Customer's Interconnection Study Deposit and (ii) the greater of the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf or \$100,000, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal.
- (c) Should an Interconnection Request made under LGIP Section 3.5.1.1 be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under LGIP Section 3.8 more than thirty (30) calendar days after the Scoping Meeting, but on or before thirty (30) calendar days following the Results Meeting for the Phase I Interconnection Study, the CAISO shall refund to the Interconnection Customer the difference between (i) the Interconnection Customer's Interconnection Study Deposit and (ii) the greater of the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf or \$50,000, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal.
- (d) Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under LGIP Section 3.8 at any time more than thirty (30) calendar days after the Results Meeting for the Phase I Interconnection Study, the Interconnection Study Deposit shall be non-refundable.
- (e) Upon execution of an LGIA by an Interconnection Customer, the CAISO and the applicable Participating TOs, or the approval by FERC of an unexecuted LGIA, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceeds the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.

Notwithstanding the foregoing, an Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request during an Interconnection Study Cycle shall be obligated to pay to the CAISO all costs in excess of the Interconnection Study Deposit that have been prudently incurred or irrevocably have been committed to be incurred with respect to that Interconnection Request prior to withdrawal. The CAISO will reimburse the applicable Participating TO(s) or third parties, as applicable, for all work performed on behalf of the withdrawn Interconnection Request at the CAISO's direction. The Interconnection Customer must pay all monies due before it is allowed to obtain any Interconnection Study data or results.

All non-refundable portions of the Interconnection Study Deposit that exceed the costs the CAISO, Participating TOs, or third parties have incurred on the Interconnection Customer's behalf shall be treated in accordance with CAISO Tariff Section 37.9.4.

### **3.5.1.3 Obligation for Study Costs.**

Except as otherwise provided in LGIP Section 3.5.1.2, the CAISO shall charge and the Interconnection Customer(s) shall pay the actual costs of the Interconnection Studies. Where an Interconnection Study is performed by means of a Group Study, the cost of the Group Study will be charged pro rata to each Interconnection Request assigned to the Group Study. The cost of Interconnection Studies performed for an individual Interconnection Request, not part of a Group Study, will be charged solely to the Interconnection Customer that submitted the Interconnection Request.

The CAISO shall issue invoices for Interconnection Studies that shall include a detailed and itemized accounting of the cost of each Interconnection Study. The CAISO shall draw from the Interconnection Study Deposit any undisputed costs within thirty (30) calendar days of issuance of an invoice. Whenever the actual cost of performing the Interconnection Studies exceeds the Interconnection Study Deposit, the Interconnection Customer shall pay the undisputed difference in accordance with the CAISO issued invoice within thirty (30) calendar days. The CAISO shall not be obligated to continue to have any studies conducted unless the Interconnection Customer has paid all undisputed amounts in compliance herewith. In the event an Interconnection Study, or portions thereof, is performed by the CAISO, the Interconnection Customer shall pay only the costs of those activities performed by the Participating TO to adequately review or validate that Interconnection Study or portions thereof.

### **3.5.1.4 Use of Site Exclusivity Deposit.**

The CAISO shall deposit all Site Exclusivity Deposits in an interest bearing account at a bank or financial institution designated by the CAISO. The Site Exclusivity Deposit shall be refundable to the Interconnection Customer at any time upon demonstration of Site Exclusivity or the Interconnection Request is withdrawn by the Interconnection Customer or deemed withdrawn by the CAISO by written notice under LGIP Section 3.8. The refund of the Site Exclusivity Deposit shall include interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal. The Site Exclusivity Deposit shall continue to be required after the Interconnection Customer either executes an LGIA or requests the filing of an unexecuted LGIA under LGIP Section 11 if Site Exclusivity has not been demonstrated.

**3.5.1.5 Proposed Commercial Operation Date.**

The proposed Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility shall not exceed seven years from the date the Interconnection Request is received by the CAISO, unless the Interconnection Customer demonstrates, and the applicable Participating TO(s) and the CAISO agree, such agreement not to be unreasonably withheld, that engineering, permitting and construction of the new Large Generating Facility or increase in capacity of the existing Generating Facility will take longer than the seven year period.

**3.5.2 Validation of Interconnection Request.**

**3.5.2.1 Acknowledgment of Interconnection Request.**

The CAISO shall notify the Interconnection Customer within six (6) Business Days of receipt of the Interconnection Request, which notice shall state whether the Interconnection Request is deemed valid.

**3.5.2.2 Deficiencies in Interconnection Request.**

An Interconnection Request will not be considered to be a valid request until all items in LGIP Section 3.5.1 have been received and deemed valid by the CAISO. If an Interconnection Request fails to meet the requirements set forth in LGIP Section 3.5.1, the CAISO shall include in its notification to the Interconnection Customer under LGIP Section 3.5.2.1 the reasons for such failure and that the Interconnection Request does not constitute a valid request. The Interconnection Customer shall provide the CAISO the additional requested information needed to constitute a valid request. Whenever additional requested information is provided by the Interconnection Customer, the CAISO shall notify the Interconnection Customer within three (3) Business Days of receipt of the additional requested information whether the Interconnection Request is valid. If the Interconnection Request continues to fail to meet the requirements set forth in LGIP Section 3.5.1, the CAISO shall include in its notification to the Interconnection Customer the reasons for such failure. If an Interconnection Request has not been deemed valid, the Interconnection Customer must submit all information necessary to meet the requirements of LGIP Section 3.5.1 no later than twenty (20) calendar days after the close of the applicable Queue Cluster Window or ten (10) calendar days after the CAISO first provided notice that the Interconnection Request was not valid, whichever is later. Interconnection Requests that have not met the requirements of LGIP Section 3.5.1 within twenty (20) calendar days after the close of the applicable Queue Cluster Window or ten (10) calendar days after the CAISO first provided notice that the Interconnection Request was not valid, whichever is later, will not be included in Interconnection Study Cycle and will be deemed invalid.

Interconnection Requests deemed invalid under this LGIP Section 3.5.2.2 are not subject to LGIP Section 3.8. Interconnection Customers with invalid Interconnection Request under this LGIP Section 3.5.2.2 may seek relief under LGIP Section 13.5 by so notifying the CAISO within two (2) Business Days of the notice of invalidity.

### **3.6 Internet Posting.**

The CAISO will maintain on the CAISO Website a list of all Interconnection Requests. The list will identify, for each Interconnection Request: (i) the maximum summer and winter megawatt electrical output; (ii) the location by county and state; (iii) the station or transmission line or lines where the interconnection will be made; (iv) the most recent projected Commercial Operation Date; (v) the status of the Interconnection Request, including whether it is active or withdrawn; (vi) the availability of any studies related to the Interconnection Request; (vii) the date of the Interconnection Request; (viii) the type of Generating Facility to be constructed (e.g., combined cycle, combustion turbine, wind turbine, and fuel type); and (ix) requested deliverability status.

Except in the case of an Affiliate, the list will not disclose the identity of the Interconnection Customer until the Interconnection Customer executes an LGIA or requests that the applicable Participating TO(s) and the CAISO file an unexecuted LGIA with FERC. The CAISO shall post on the CAISO Website an advance notice whenever a Scoping Meeting will be held with an Affiliate of a Participating TO.

The CAISO shall post to the CAISO Website any deviations from the study timelines set forth herein. The CAISO shall further post to the CAISO Website non-confidential portions of the Phase I Interconnection Study following the final Results Meeting and non-confidential portions of the Phase II Interconnection Study no later than publication of the final Transmission Plan under CAISO Tariff Section 24.2.5.2.

### **3.7 Coordination with Affected Systems.**

The CAISO will notify the Affected System Operators that are potentially affected by the Interconnection Customer's Interconnection Request or Group Study within which the Interconnection Customer's Interconnection Request will be studied. The CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System Operators, to the extent possible, and, if possible, the CAISO will include those results (if available) in its applicable Interconnection Study within the time frame specified in this LGIP. The CAISO will include such Affected System Operators in all meetings held with the Interconnection Customer as required by this LGIP. The Interconnection Customer will cooperate with the CAISO in all matters related to the conduct of studies and the determination of modifications to Affected Systems, including signing separate study agreements with Affected System owners and paying for necessary studies. An entity which may be an Affected System shall cooperate with the CAISO in all matters related to the conduct of studies and the determination of modifications to Affected Systems.

### **3.8 Withdrawal.**

The Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to the CAISO, and the CAISO will notify the applicable Participating TO(s) and Affected System Operators, if any, within three (3) Business Days of receipt of such a notice. In addition, after confirmation by the CAISO of a valid Interconnection Request under LGIP Section 3.5.2, if the Interconnection Customer fails to adhere to all requirements of this LGIP, except as provided in LGIP Section 13.5 (Disputes), the CAISO shall deem the Interconnection Request to be withdrawn and shall provide written notice to the Interconnection Customer within five (5) Business Days of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Upon receipt of such written notice, the Interconnection Customer shall have five (5) Business Days in which to respond with information or action that either cures the deficiency or supports its position that the deemed withdrawal was erroneous and notifies the CAISO of its intent to pursue Dispute Resolution.

Withdrawal shall result in the removal of the Interconnection Request from the Interconnection Study Cycle. If an Interconnection Customer disputes the withdrawal and removal from the Interconnection Study Cycle and has elected to pursue Dispute Resolution, the Interconnection Customer's Interconnection Request will not be considered in any ongoing Interconnection Study during the Dispute Resolution process.

In the event of such withdrawal, the CAISO, subject to the provisions of LGIP Sections 13.1 and 3.5.1.2, shall provide, at the Interconnection Customer's request, all information that the CAISO developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.

### **3.9 Transferability of Interconnection Request.**

An Interconnection Customer may transfer its Interconnection Request to another entity only if such entity acquires the specific Generating Facility identified in the Interconnection Request and the Point of Interconnection does not change.

## **Section 4 Large Generator Interconnection Study Process Agreement.**

Within thirty (30) calendar days of the close of the Queue Cluster Window, the CAISO shall provide to each Interconnection Customer with a valid Interconnection Request received during the Queue Cluster Window a *pro forma* Large Generator Interconnection Study Process Agreement in the form set forth in Appendix 3 of this LGIP. The *pro forma* Large Generator Interconnection Study Process Agreement shall specify that the Interconnection Customer is responsible for the actual cost of the Interconnection Studies, including reasonable administrative costs, and all requirements of this LGIP.

Within three (3) Business Days following the Scoping Meeting, the Interconnection Customer shall specify for inclusion in the attachment to the Large Generator Interconnection Study Process Agreement the Point of Interconnection for the Phase I Interconnection Study. Within ten (10) Business Days following the CAISO's receipt of such designation, the CAISO, in coordination with the applicable Participating TOs, shall provide to the Interconnection Customer a signed Large Generator Interconnection Study Process Agreement. The Interconnection Customer shall execute and deliver to the CAISO the Large Generator Interconnection Study Process Agreement no later than thirty (30) calendar days after the Scoping Meeting.

**Section 5 Scoping Meeting.**

Within five (5) Business Days after the CAISO notifies the Interconnection Customer of a valid Interconnection Request, the CAISO shall establish a date agreeable to the Interconnection Customer and the applicable Participating TO(s) for the Scoping Meeting. All Scoping Meetings shall occur no later than sixty (60) calendar days after the close of the Queue Cluster Window, unless otherwise mutually agreed upon by the Parties. The CAISO shall determine whether the Interconnection Request is at or near the boundary of an affected Participating TO(s) service territory or of any other Affected System(s) so as to potentially affect such third parties. If such a determination is made, the CAISO shall invite the affected Participating TO(s), and/or Affected System Operator(s) in accordance with LGIP Section 3.7, to the Scoping Meeting by informing such third parties of the time and place of the scheduled Scoping Meeting as soon as practicable.

The purpose of the Scoping Meeting shall be to discuss reasonable Commercial Operation Dates and alternative interconnection options, to exchange information including any transmission data that would reasonably be expected to impact such interconnection options, to analyze such information and to determine the potential feasible Points of Interconnection and eliminate alternatives given resources and available information. The applicable Participating TO(s) and the CAISO will bring to the meeting, as reasonably necessary to accomplish its purpose, the following: (a) such already available technical data, including, but not limited to, (i) general facility loadings, (ii) general instability issues, (iii) general short circuit issues, (iv) general voltage issues, and (v) general reliability issues, and (b) general information regarding the number, location, and capacity of other Interconnection Requests in the Interconnection Study Cycle that may potentially form a Group Study with the Interconnection Customer's Interconnection Request.

The Interconnection Customer will bring to the Scoping Meeting, in addition to the technical data in Attachment A to LGIP Appendix 1, any system studies previously performed. The applicable Participating TO(s), the CAISO and the Interconnection Customer will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. On the basis of the meeting, the Interconnection Customer shall designate its Point of Interconnection. The duration of the meeting shall be sufficient to accomplish its purpose.



The CAISO shall prepare minutes from the meeting, verified by the Interconnection Customer and the other attendees, that will include, at a minimum, discussions among the applicable Participating TO(s) and the CAISO of the expected results and a good faith estimate of the costs for the Phase I Interconnection Study.

**Section 6 Interconnection Studies.**

**6.1 Grouping Interconnection Requests.**

At the CAISO's option, and in coordination with the applicable Participating TO(s), an Interconnection Request received during a particular Queue Cluster Window may be studied individually or in a Group Study for the purpose of conducting one or more of the analyses forming the Interconnection Studies. For each Interconnection Study within an Interconnection Study Cycle, the CAISO may develop one or more Group Studies. A Group Study will include, at the CAISO's sole judgment after coordination with the applicable Participating TO(s), Interconnection Requests that electrically affect one another with respect to the analysis being performed without regard to the nature of the underlying Interconnection Service. The CAISO may also, in its sole judgment after coordination with the applicable Participating TO(s), conduct an Interconnection Study for an Interconnection Request separately to the extent warranted by Good Utility Practice based upon the electrical remoteness of the proposed Large Generating Facility from other Large Generating Facilities with Interconnection Requests in the same Queue Cluster Window.

An Interconnection Request's inclusion in a Group Study will not relieve the CAISO or Participating TO(s) from meeting the timelines for conducting the Phase I Interconnection Study provided in the LGIP. Group Studies shall be conducted in such a manner to ensure the efficient implementation of the applicable regional transmission expansion plan in light of the transmission system's capabilities at the time of each study.

**6.2 Scope and Purpose of Phase I Interconnection Study.**

The Phase I Interconnection Study shall (i) evaluate the impact of all Interconnection Requests received during the Queue Cluster Window on the CAISO Controlled Grid, (ii) preliminarily identify all Network Upgrades needed to address the impacts on the CAISO Controlled Grid of the Interconnection Requests, (iii) preliminarily identify for each Interconnection Request required Interconnection Facilities, (iv) assess the Point of Interconnection selected by each Interconnection Customer and potential alternatives to evaluate potential efficiencies in overall transmission upgrades costs, (v) establish the maximum cost responsibility for Network Upgrades assigned to each Interconnection Request in accordance with LGIP Section 6.3, and (vi) provide a good faith estimate of the cost of Interconnection Facilities for each Interconnection Request.

The Phase I Interconnection Study will consist of a short circuit analysis, a stability analysis to the extent the CAISO and applicable Participating TO(s) reasonably expect transient or voltage stability concerns, a power flow analysis, including off-peak analysis, and an On-Peak and Off-Peak Deliverability Assessment(s), as applicable, in accordance with LGIP Section 6.3.2. The Phase I Interconnection Study will state for each Group Study or Interconnection Request studied individually (i) the assumptions upon which it is based, (ii) the results of the analyses, and (iii) the requirements or potential impediments to providing the requested Interconnection Service to all Interconnection Requests in a Group Study or to the Interconnection Request studied individually. The Phase I Interconnection Study will provide, without regard to the requested Commercial Operation Dates of the Interconnection Requests, a list of Network Upgrades to the CAISO Controlled Grid that are preliminarily identified as required as a result of the Interconnection Requests in a Group Study or as a result of any Interconnection Request studied individually and Participating TO's Interconnection Facilities associated with each Interconnection Request, and an estimate of any other financial impacts (i.e., on Local Furnishing Bonds).

### **6.3 Identification and Cost Allocation Methods for Network Upgrades in Phase I Interconnection Study.**

#### **6.3.1 Reliability Network Upgrades.**

The CAISO, in coordination with the applicable Participating TO(s), will perform short circuit and stability analyses for each Interconnection Request either individually or as part of a Group Study to preliminarily identify the Reliability Network Upgrades needed to interconnect the Large Generating Facilities to the CAISO Controlled Grid. The CAISO, in coordination with the applicable Participating TO(s), shall also perform power flow analyses, under a variety of system conditions, for each Interconnection Request either individually or as part of a Group Study to identify Reliability Criteria violations, including applicable thermal overloads, that must be mitigated by Reliability Network Upgrades.

The cost of all Reliability Network Upgrades identified in the Phase I Interconnection Study shall be estimated in accordance with LGIP Section 6.4. The estimated costs of Reliability Network Upgrades identified as a result of an Interconnection Request studied separately shall be assigned solely to that Interconnection Request. The estimated costs of Reliability Network Upgrades identified through a Group Study shall be assigned to all Interconnection Requests in that Group Study pro rata on the basis of the maximum megawatt electrical output of each proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed by the Interconnection Customer in its Interconnection Request.

#### **6.3.2 Delivery Network Upgrades.**

### **6.3.2.1 The On-Peak Deliverability Assessment.**

The CAISO, in coordination with the applicable Participating TO(s), shall perform an On-Peak Deliverability Assessment for Interconnection Customers selecting Full Capacity Deliverability Status in their Interconnection Requests. The On-Peak Deliverability Assessment shall determine the Interconnection Customer's Large Generating Facility's ability to deliver its Energy to the CAISO Controlled Grid under peak load conditions, and identify preliminary Delivery Network Upgrades required to provide the Large Generating Facility with Full Capacity Deliverability Status. The preliminary Delivery Network Upgrades identified by the On-Peak Deliverability Assessment will be used to establish the maximum cost responsibility for Delivery Network Upgrades for each Interconnection Customer selecting Full Capacity Deliverability Status. Deliverability of a new Large Generating Facility will be assessed on the same basis as all other existing resources interconnected to the CAISO Controlled Grid.

The On-Peak Deliverability Assessment will identify the Network Upgrades that are required to enable the Large Generating Facility of each Interconnection Customer requesting Full Capacity Deliverability Status to meet the requirements for deliverability. Deliverability requires that the Generating Facility Capacity, as set forth in the Interconnection Request, can be delivered to the aggregate of Load on the CAISO Controlled Grid, consistent with Reliability Criteria, under CAISO Controlled Grid peak load and Contingency conditions, and assuming the aggregate output of existing Generating Facilities with established Net Qualifying Capacity values and other Large Generating Facilities in the Interconnection Study Cycle seeking Full Capacity Deliverability Status identified within the On-Peak Deliverability Assessment based on the effect of transmission Constraints.

The On-Peak Deliverability Assessment will further perform an analysis to estimate the MW of deliverable generation capacity for the individual or Group Study if the highest cost Delivery Network Upgrade component were removed from the preliminary Delivery Network Upgrade plan, or, at the CAISO's sole discretion, if any other identified Delivery Network Upgrade component(s) were removed from the preliminary Delivery Network Upgrade plan. This information is provided to allow Interconnection Customers to address at the Results Meeting potential modifications under LGIP Section 6.7.2 or change the Interconnection Request's Full Capacity Deliverability Status for purposes of financing under LGIP Section 12.3.1.

The methodology for the On-Peak Deliverability Assessment will be published on the CAISO Website or, when effective, included in a CAISO Business Practice Manual. The On-Peak Deliverability Assessment does not convey any right to deliver electricity to any specific customer or Delivery Point.

The cost of all Delivery Network Upgrades identified in the On-Peak Deliverability Assessment as part of a Phase I Interconnection Study shall be estimated in accordance with LGIP Section 6.4. The estimated costs of Delivery Network Upgrades identified in the On-Peak Deliverability Assessment shall be assigned to all Interconnection Requests selecting Full Capacity Deliverability Status based on the flow impact of each such Large Generating Facility on the Delivery Network Upgrades as determined by the Generation distribution factor methodology set forth in the On-Peak Deliverability Assessment methodology.

### **6.3.2.2 Off-Peak Deliverability Assessment.**

The CAISO, in coordination with the applicable Participating TO(s), shall perform an Off-Peak Deliverability Assessment for Interconnection Customers selecting Full Capacity Deliverability Status in their Interconnection Requests to determine Delivery Network Upgrades in addition to those identified in the On-Peak Deliverability Assessment, if any, for a Group Study or individual Phase I Interconnection Study that includes one or more Location Constrained Resource Interconnection Generators (LCRIG), where the fuel source or source of energy for the LCRIG substantially occurs during off-peak conditions. Delivery Network Upgrades will be identified under this Section to ensure that the full maximum megawatt electrical output of each proposed new LCRIG or the amount of megawatt increase in the generating capacity of each existing LCRIG as listed by the Interconnection Customer in its Interconnection Request, whether studied individually or as a Group Study, is deliverable to the aggregate of Load on the CAISO Controlled Grid under the Generation dispatch conditions studied. The methodology for the Off-Peak Deliverability Assessment will be published on the CAISO Website or, if applicable, included in a CAISO Business Practice Manual.

At the CAISO's discretion, an additional Off-Peak Deliverability Assessment may be performed to estimate the MW of deliverable generation capacity from the LCRIG studied individually or from the Group Study if the highest cost, or any other, Delivery Network Upgrade component were removed from the preliminary Delivery Network Upgrade plan. This information is provided to allow Interconnection Customers to address at the Results Meeting potential modifications under LGIP Section 6.7.2 or change the Interconnection Request's Full Capacity Deliverability Status for purposes of financing under LGIP Section 12.3.1.

The cost of all Delivery Network Upgrades identified in the Off-Peak Deliverability Assessment as part of Phase I Interconnection Study shall be estimated in accordance with LGIP Section 6.4. The estimated costs of Delivery Network Upgrades identified in the Off-Peak Deliverability Assessment shall be assigned to each Interconnection Request included in the Group Study or studied individually based on the flow impact of each such LCRIG on the Delivery Network Upgrades as determined by the Generation distribution factor methodology set forth in the Off-Peak Deliverability Assessment methodology.

### **6.4 Use of Per Unit Costs to Estimate Network Upgrade Costs.**

Prior to the commencement of the initial Queue Cluster Window for each calendar year, each Participating TO, under the direction of the CAISO, shall publish per unit costs for facilities generally required to interconnect Generation to their respective systems.

These per unit costs shall reflect the anticipated cost of procuring and installing such facilities during the current Interconnection Study Cycle, and may vary among Participating TOs and within a Participating TO Service Territory based on geographic and other cost input differences, and should include an annual adjustment for the following ten (10) years to account for the anticipated timing of procurement to accommodate a potential range of Commercial Operation Dates of Interconnection Requests in the Interconnection Study Cycle. The per unit costs will be used to develop the cost of Reliability Network Upgrades, Delivery Network Upgrades and Participating TO's Interconnection Facilities under this LGIP Section 6.

Prior to adoption and publication of final per unit costs for use in the Interconnection Study Cycle, the CAISO shall publish to the CAISO Website draft per unit costs, including non-confidential information regarding the bases therefore, hold a stakeholder meeting to address the draft per unit costs, and permit stakeholders to provide comments on the draft per unit costs.

**6.5 Phase I Interconnection Study Costs Form the Basis of Interconnection Financial Security.**

The costs assigned to Interconnection Customers for Network Upgrades under this Section 6 of the LGIP shall establish the maximum value for the Interconnection Financial Security required from each Interconnection Customer under LGIP Section 9 for such Network Upgrades. In contrast, the costs assigned to Interconnection Customers for Participating TO's Interconnection Facilities under this Section 6 of the LGIP are estimates only that establish the basis for the initial Interconnection Financial Security required from each Interconnection Customer under LGIP Section 9.2.

**6.6 Phase I Interconnection Study Procedures.**

The CAISO shall coordinate the Phase I Interconnection Study with applicable Participating TO(s) pursuant to LGIP Section 3.2 and any Affected System that is affected by the Interconnection Request pursuant to LGIP Section 3.7. Existing studies shall be used to the extent practicable when conducting the Phase I Interconnection Study. The CAISO will coordinate Base Case development with the applicable Participating TOs to ensure the Base Cases are accurately developed. The CAISO shall use Reasonable Efforts to complete and publish to Interconnection Customers the Phase I Interconnection Study report at a maximum within two hundred seventy (270) calendar days after the close of the Queue Cluster Window and approximately one hundred eighty calendar days after the final Scoping Meeting held for the Interconnection Study Cycle; however, each individual study or Group Studies may be completed prior to this maximum time where practicable based on factors, including, but not limited to, the number of Interconnection Requests in the Queue Cluster Window, study complexity, and reasonable availability of subcontractors as provided under LGIP Section 13.2. The CAISO will share applicable study results with the applicable Participating TO(s) for review and comment and will incorporate comments into the study report. The CAISO will issue a final Phase I Interconnection Study report to the Interconnection Customer. At the time of completion of the Phase I Interconnection Study, the CAISO may, at the Interconnection Customer's request, determine whether the provisions of LGIP Section 7.6 apply.

At any time the CAISO determines that it will not meet the required time frame for completing the Phase I Interconnection Study due to the large number of Interconnection Requests in the Queue Cluster Window, study complexity, or unavailability of subcontractors on a reasonable basis to perform the study in the required time frame, the CAISO shall notify the Interconnection Customers as to the schedule status of the Phase I Interconnection Study and provide an estimated completion date with an explanation of the reasons why additional time is required.

Upon request, the CAISO shall provide the Interconnection Customer all supporting documentation, workpapers and relevant pre-Interconnection Request and post-Interconnection Request power flow, short circuit and stability databases for the Phase I Interconnection Study, subject to confidentiality arrangements consistent with LGIP Section 13.1.

## **6.7 Phase I Interconnection Study Results Meeting.**

Within thirty (30) calendar days of providing the Phase I Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s), the CAISO and the Interconnection Customer shall hold a Results Meeting to discuss the results of the Phase I Interconnection Study, including assigned cost responsibility.

### **6.7.1 Commercial Operation Date.**

At the Results Meeting, the Interconnection Customer shall provide a schedule outlining key milestones including environmental survey start date, expected environmental permitting submittal date, expected procurement date of project equipment, back-feed date for project construction, and expected project construction date. This will assist the parties in determining if Commercial Operation Dates are reasonable. If major Interconnection Customer's Interconnection Facilities for the Large Generating Facility have been identified in the Phase I Interconnection Study, such as telecommunications equipment to support a possible Special Protection System (SPS), distribution feeders to support back feed, new substation, and/or expanded substation work, permitting and material procurement lead times may result in the need to alter the proposed Commercial Operation Date. The Parties may agree to a new Commercial Operation Date. In addition, where an Interconnection Customer intends to establish Commercial Operation separately for different Electric Generating Units or project phases at its Generating Facility, it may only do so in accordance with an implementation plan agreed to in advance by the CAISO and Participating TO, which agreement shall not be unreasonably withheld. Where the parties cannot agree, the Commercial Operation Date determined reasonable by the CAISO, in coordination with the applicable Participating TO(s), will be used for the Phase II Interconnection Study where the changed Commercial Operation Date is needed to accommodate the anticipated completion, assuming Reasonable Efforts by the applicable Participating TO(s), of necessary Reliability Network Upgrades and/or Participating TO's Interconnection Facilities, pending the outcome of any relief sought by the Interconnection Customer under LGIP Section 13.5. The Interconnection Customer must notify the CAISO within five (5) Business Days following the Results Meeting that it is initiating dispute procedures under LGIP Section 13.5.

### **6.7.2 Modifications.**

At the Results Meeting, the Interconnection Customer should be prepared to discuss any desired modifications to the Interconnection Request. Within five (5) Business Days following the Results Meeting, the Interconnection Customer shall submit to the CAISO, in writing, modifications to any information provided in the Interconnection Request. The CAISO will forward the Interconnection Customer's modification to the applicable Participating TO(s) within one (1) Business Day of receipt. The Interconnection Customer shall remain eligible for the Phase II Interconnection Study if the modifications are in accordance with LGIP Sections 6.7.2.1 or 6.7.2.2.

Notwithstanding the above, during the course of the Interconnection Studies, the Interconnection Customer, the applicable Participating TO(s), or the CAISO may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes are acceptable to the applicable Participating TO(s), the CAISO, and Interconnection Customer, such acceptance not to be unreasonably withheld, the CAISO shall modify the Point of Interconnection and/or configuration in accordance with such changes without altering the Interconnection Request's eligibility for participating in Interconnection Studies.

**6.7.2.1** Modifications permitted under this Section 6.7.2 shall include specifically: (a) a decrease in the electrical output (MW) of the proposed project; (b) modifying the technical parameters associated with the Large Generating Facility technology or the Large Generating Facility step-up transformer impedance characteristics; and (c) modifying the interconnection configuration.

**6.7.2.2** For any modification other than those specifically permitted by LGIP Section 6.7.2.1, the Interconnection Customer may first request that the CAISO evaluate whether such modification is a Material Modification. In response to the Interconnection Customer's request, the CAISO, in coordination with the affected Participating TO(s) and, if applicable, any Affected System Operator, shall evaluate the proposed modifications prior to making them and the CAISO shall inform the Interconnection Customer in writing of whether the modifications would constitute a Material Modification. Any change to the Point of Interconnection, except for that specified by the CAISO in an Interconnection Study or otherwise allowed under this LGIP Section 6.7.2, shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

## **Section 7 Phase II Interconnection Study.**

### **7.1 Scope of Phase II Interconnection Study.**

The CAISO, in coordination with the applicable Participating TO(s), will conduct a Phase II Interconnection Study that will incorporate eligible Interconnection Requests from the previous two Phase I Interconnection Studies. The Phase II Interconnection Study shall

(i) update, as necessary, analyses performed in the Phase I Interconnection Studies to account for the withdrawal of Interconnection Requests, (ii) identify final Reliability Network Upgrades needed to physically interconnect the Large Generating Facilities, (iii) assign responsibility for financing the identified final Reliability Network Upgrades, (iv) identify, following coordination with the CAISO's Transmission Planning Process, final Delivery Network Upgrades needed to interconnect those Large Generating Facilities selecting Full Capacity Deliverability Status, (v) assign responsibility for financing Delivery Network Upgrades needed to interconnect those Large Generating Facilities selecting Full Capacity Deliverability Status, (vi) identify for each Interconnection Request final Point of Interconnection and Participating TO's Interconnection Facilities and Interconnection Customer's Interconnection Facilities, (vii) provide a +/-20% estimate for each Interconnection Request of the final Participating TO's Interconnection Facilities and Interconnection Customer's Interconnection Facilities, and (viii) optimize in-service timing requirements based on operational studies in order to maximize achievement of the Commercial Operation Dates of the Large Generating Facilities.

With respect to the foregoing items, the Phase II Interconnection Study shall specify and estimate the cost of the equipment, engineering, procurement and construction work, including the financial impacts (i.e., on Local Furnishing Bonds), if any, and schedule for effecting remedial measures that address such financial impacts, needed on the CAISO Controlled Grid to implement the conclusions of the updated Phase II Interconnection Study technical analyses in accordance with Good Utility Practice to physically and electrically connect the Interconnection Customer's Interconnection Facilities to the CAISO Controlled Grid. The Phase II Interconnection Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Participating TO's Interconnection Facilities and Network Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities.

## **7.2 Coordination of the Phase II Interconnection Study with the Transmission Planning Process.**

The CAISO shall coordinate the Phase II Interconnection Studies with the CAISO's Transmission Planning Process under CAISO Tariff Section 24. This coordination shall include, but not be limited to:

- (i) consistency, to the maximum extent applicable under Good Utility Practice, between the Interconnection Base Case Data used for performance of the Phase II Interconnection Studies and the Unified Planning Assumptions developed for the Transmission Planning Process, including, but not limited to, data relating to Demand data, network topology, and generation resources;
- (ii) consideration of any conceptual transmission plan(s) developed, but not rejected, in the current or former Transmission Planning Processes intended to access generation development areas as a means to satisfy the Network Upgrade requirements to interconnect Generating Facilities included in the Phase II Interconnection Study;



- (iii) performance of sensitivities within the Transmission Planning Process, including cases considering Generating Facilities included in the Phase II Interconnection Study(ies) to the extent possible, to optimize transmission upgrades developed in the current Transmission Planning Process to achieve System Reliability, economic efficiency, and satisfy the Network Upgrade requirements to interconnect Generating Facilities included in the Phase II Interconnection Study;
- (iv) consideration of future generation development potential in transmission upgrade designs pursuant to criteria developed as part of the Unified Planning Assumptions; and
- (v) consideration of phased development and option value of transmission projects to address uncertainty.

Network Upgrades, apart from detail engineering and final cost determinations, identified in any Phase II Interconnection Study or as part of the Transmission Planning Process that must receive CAISO Governing Board approval under Section 24 of the CAISO Tariff may be subject to Section 24.2.5.2 of the CAISO Tariff.

Generation projects entering the Phase II Interconnection Study will also be considered in the Unified Planning Assumptions, as appropriate. Transmission projects proposed through the Phase II Interconnection Study that require CAISO Governing Board approval will be integrated into the stakeholder process under the Transmission Planning Process.

### **7.3 Financing of Reliability Network Upgrades.**

The responsibility to finance final Reliability Network Upgrades identified in the Phase II Interconnection Study of an Interconnection Request studied separately shall be assigned solely to that Interconnection Request up to the cost assignment for Reliability Network Upgrades under LGIP Section 6.3.1. The responsibility to finance final Reliability Network Upgrades identified through a Group Study in the Phase II Interconnection Study shall be assigned to all Interconnection Requests in that Group Study pro rata on the basis of the maximum megawatt electrical output of each proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed by the Interconnection Customer in its Interconnection Request up to the cost assignment for Reliability Network Upgrades under LGIP Section 6.3.1.

### **7.4 Financing of Delivery Network Upgrades.**

The responsibility to finance all Delivery Network Upgrades identified in the On-Peak Deliverability Assessment and Off-Peak Deliverability Assessment as part of Phase II Interconnection Study shall be assigned to all Interconnection Requests selecting Full Capacity Deliverability Status based on the flow impact of each such Large Generating Facility on each Delivery Network Upgrade as determined by the Generation distribution factor methodology set forth in the On-Peak and Off-Peak Deliverability Assessment methodologies. The financing responsibility shall be up to, but no greater than, the cost assignment for Delivery Network Upgrades for each Interconnection Request under LGIP Sections 6.3.2.1 and 6.3.2.2.

**7.5 Phase II Interconnection Study Procedures.**

The CAISO shall coordinate the Phase II Interconnection Study with applicable Participating TO(s) and any Affected System that is affected by the Interconnection Request pursuant to LGIP Section 3.7. Existing studies shall be used to the extent practicable when conducting the Phase II Interconnection Study. The CAISO will coordinate Base Case development with the applicable Participating TOs to ensure the Base Cases are accurately developed. The CAISO shall use Reasonable Efforts to complete and publish to Interconnection Customers the Phase II Interconnection Study report within three hundred thirty (330) calendar days from January 1 of each calendar year. The CAISO will share applicable study results with the applicable Participating TO(s), for review and comment, and will incorporate comments into the study report. The CAISO will issue a final Phase II Interconnection Study report to the Interconnection Customer.

At the request of the Interconnection Customer or at any time the CAISO determines that it will not meet the required time frame for completing the Phase II Interconnection Study, the CAISO shall notify the Interconnection Customer as to the schedule status of the Phase II Interconnection Study and provide an estimated completion date with an explanation of the reasons why additional time is required.

Upon request, the CAISO shall provide the Interconnection Customer all supporting documentation, workpapers and relevant pre-Interconnection Request and post-Interconnection Request power flow, short circuit and stability databases for the Phase II Interconnection Study, subject to confidentiality arrangements consistent with LGIP Section 13.1.

**7.6 Accelerated Phase II Interconnection Study Process.**

The Phase II Interconnection Study shall be completed within one hundred fifty (150) calendar days following the posting of the initial Interconnection Financial Security under LGIP Section 9 where the Interconnection Request meets the following criteria: (i) the Interconnection Request was not grouped with any other Interconnection Requests during the Phase I Interconnection Study or was identified as interconnecting to a point of available transmission during the Phase I Interconnection Study, and (ii) the Interconnection Customer is able to demonstrate that the general Phase II Interconnection Study timeline under LGIP Section 7.5 is not sufficient to accommodate the Commercial Operation Date of the Large Generating Facility.

In addition to the above criteria, the CAISO may apply to FERC in coordination with the Interconnection Customer for a waiver of the timelines in this LGIP to meet the schedule required by an order, ruling, or regulation of the Governor of the State of California, the CPUC, or the CEC.

**7.7 Meeting with the CAISO and Applicable Participating TO(s).**

Within thirty (30) calendar days of providing the final Phase II Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s), the CAISO and the Interconnection Customer shall meet to discuss the results of the Phase II Interconnection Study, including selection of the final Commercial Operation Date.

**Section 8 [NOT USED]**

**Section 9 Interconnection Financial Security.**

**9.1 Types of Interconnection Financial Security.**

The Interconnection Financial Security posted by an Interconnection Customer may be any combination of the following types of Interconnection Financial Security provided in favor of the applicable Participating TO(s):

- (a) an irrevocable and unconditional letter of credit issued by a bank or financial institution that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's;
- (b) an irrevocable and unconditional surety bond issued by an insurance company that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's;
- (c) an unconditional and irrevocable guaranty issued by a company has a credit rating of A or better by Standard and Poors or A2 or better by Moody's;
- (d) a cash deposit standing to the credit of the CAISO and applicable Participating TO(s) in an interest-bearing escrow account maintained at a bank or financial institution that is reasonably acceptable to the CAISO;
- (e) a certificate of deposit in the name of the CAISO issued by a bank or financial institution that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's; or
- (f) a payment bond certificate in the name of the CAISO issued by a bank or financial institution that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's.

Interconnection Financial Security instruments as listed above shall be in such form as the CAISO and applicable Participating TO(s) may reasonably require from time to time by notice to Interconnection Customers or in such other form as has been evaluated and approved as reasonably acceptable by the CAISO and applicable Participating TO(s).

The CAISO shall publish and maintain standardized forms related to the types of Interconnection Financial Security listed above on the CAISO Website. The CAISO shall require the use of standardized forms of Interconnection Financial Security to the greatest extent possible. If at any time the guarantor of the Interconnection Financial Security fails to maintain the credit rating required by this LGIP Section 9.1, the Interconnection Customer shall provide to the CAISO replacement Interconnection Financial Security meeting the requirements of this LGIP Section 9.1 within five (5) Business Days of the change in credit rating.

Interest on a cash deposit standing to the credit of the CAISO in an interest-bearing escrow account under subpart (d) of this LGIP Section 9.1 will accrue to the Interconnection Customer's benefit and will be added to the Interconnection Customer's account on a monthly basis.

**9.2 Initial Posting of Interconnection Financial Security.**

On or before ninety (90) calendar days after publication of the final Phase I Interconnection Study report, Interconnection Customers must post, with notice to the CAISO, two separate Interconnection Financial Security instruments (i) in the amount of twenty percent (20%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study for Network Upgrades, or \$500,000, whichever is greater, and (ii) in the amount of twenty percent (20%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study for Participating TO's Interconnection Facilities. The failure by an Interconnection Customer to timely post, and notify the CAISO of the posting of, the Interconnection Financial Security required by this LGIP Section 9.2 shall result in the Interconnection Request being deemed withdrawn and subject to LGIP Section 3.8.

**9.3 Second Posting of Interconnection Financial Security.**

On or before one hundred eighty (180) calendar days after publication of the final Phase II Interconnection Study report or at the start of Construction Activities of Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer, whichever is earlier, the Interconnection Customer must post separate Interconnection Financial Security instruments in the total amount of one hundred percent (100%) of the total cost responsibility assigned to the Interconnection Customer (i) in the final Phase I Interconnection Study for Network Upgrades, if greater than \$500,000, and (ii) in the final Phase II Interconnection Study for Participating TO's Interconnection Facilities. The start date for Construction Activities of Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer must be set forth in the Interconnection Customer's LGIA if that start date is prior to one hundred eighty (180) calendar days after publication of the final Phase II Interconnection Study report. The failure by an Interconnection Customer to timely post the Interconnection Financial Security required by this LGIP Section 9.2 shall constitute grounds for termination of the LGIA pursuant to LGIA Article 2.3.

**9.4 General Effect of Withdrawal of Interconnection Request or Termination of the LGIA on Interconnection Financial Security.**

Except as set forth in LGIP Section 9.4.1, withdrawal of an Interconnection Request or termination of an LGIA shall allow the applicable Participating TO(s) to liquidate the Interconnection Financial Security, or balance thereof, posted by the Interconnection Customer for Network Upgrades at the time of withdrawal. To the extent the amount of the liquidated Interconnection Financial Security plus capital, if any, separately provided by the Interconnection Customer to satisfy its obligation to finance Network Upgrades in accordance with LGIP Section 12.3 exceeds the total cost responsibility for Network Upgrades assigned to the Interconnection Customer by the Phase I Interconnection Study, the applicable Participating TO(s) shall remit to the Interconnection Customer the excess amount.

Withdrawal of an Interconnection Request or termination of an LGIA shall result in the release to the Interconnection Customer of any Interconnection Financial Security posted by the Interconnection Customer for Participating TO's Interconnection Facilities, except with respect to any amounts necessary to pay for costs incurred or irrevocably committed by the applicable Participating TO(s) on behalf of the Interconnection Customer for the Participating TO's Interconnection Facilities and for which the applicable Participating TO(s) has not been reimbursed.

**9.4.1 Conditions for Partial Recovery of Interconnection Financial Security Upon Withdrawal of Interconnection Request or Termination of LGIA.**

A portion of the Interconnection Financial Security shall be released to the Interconnection Customer, consistent with LGIP Section 9.4.2, if the withdrawal of the Interconnection Request or termination of the LGIA occurs for any of the following reasons:

- (a) **Failure to Secure a Power Purchase Agreement.** At the time of withdrawal of the Interconnection Request or termination of the LGIA, the Interconnection Customer demonstrates to the CAISO that it has failed to secure an acceptable power purchase agreement for the Energy or capacity of the Large Generating Facility after a good faith effort to do so. A good faith effort can be established by demonstrating participation in a competitive solicitation process or bilateral negotiations with an entity other than an Affiliate that progressed, at minimum, to the mutual exchange by all counter-parties of proposed term sheets.
- (b) **Failure to Secure a Necessary Permit.** At the time of withdrawal of the Interconnection Request or termination of the LGIA, the Interconnection Customer demonstrates to the CAISO that it has received a final denial from the primary issuing Governmental Authority of any permit or other authorization necessary for the construction or operation of the Large Generating Facility.

- (c) **Increase in the Cost of Participating TO's Interconnection Facilities.** The Interconnection Customer withdraws the Interconnection Request or terminates the LGIA based on an increase of more than 30% or \$300,000, whichever is greater, in the estimated cost of Participating TO's Interconnection Facilities between the Phase I Interconnection Study and the Phase II Interconnection Study.
- (d) **Material Change in Interconnection Customer Interconnection Facilities Created by a CAISO Change in the Point of Interconnection.** The Interconnection Customer withdraws the Interconnection Request or terminates the LGIA based on a material change from the Phase I Interconnection Study in the Point of Interconnection for the Large Generating Facility mandated by the CAISO and included in the final Phase II Interconnection Study. A material change in the Point of Interconnection shall be where Point of Interconnection has moved to (i) a different substation, (ii) a different line on a different right of way, or (iii) a materially different location than previously identified on the same line.

**9.4.2 Schedule for Determining Non-Refundable Portion of the Interconnection Financial Security for Network Upgrades.**

**9.4.2.1 Up to One Hundred Eighty Days After Final Phase II Interconnection Study Report.**

If, at any time after the initial posting of the Interconnection Financial Security for Network Upgrades under LGIP Section 9.2 and on or before one hundred eighty (180) calendar days after the date of issuance of the final Phase II Interconnection Study report, the Interconnection Customer withdraws the Interconnection Request or terminates the LGIA, as applicable, in accordance with LGIP Section 9.4.1, the applicable Participating TO(s) shall liquidate the Interconnection Financial Security for Network Upgrades under LGIP Section 9.2 and reimburse the Interconnection Customer in an amount of (i) fifty percent (50%) of the value of the posted Interconnection Financial Security for Network Upgrades, or, (ii) if the Interconnection Financial Security has been drawn down to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer, the lesser of the remaining balance of the Interconnection Financial Security or the amount calculated under (i) above. If the Interconnection Customer has separately provided capital apart from the Interconnection Financial Security to finance Pre-Construction Activities for Network Upgrades, the applicable Participating TO(s) will credit the capital provided as if drawn from the Interconnection Financial Security and apply (ii) above.

**9.4.2.2 Between One Hundred Eighty-One Days and Three Hundred Sixty-Five Days After Final Phase II Interconnection Study Report.**

If, at any time between one hundred eighty-one (181) calendar days and three hundred sixty-five (365) calendar days after the date of issuance of the final Phase II Interconnection Study report, the Interconnection Customer withdraws the Interconnection Request or terminates the LGIA, as applicable, in accordance with LGIP Section 9.4.1, the applicable Participating TO(s) shall liquidate the Interconnection Financial Security for Network Upgrades under LGIP Section 9.3 and reimburse the Interconnection Customer in an amount of (i) fifty percent (50%) of the posted value of the Interconnection Financial Security for Network Upgrades, or, (ii) if the Interconnection Financial Security has been drawn down to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer, the lesser of the remaining balance of the Interconnection Financial Security or the amount calculated under (i) above. If the Interconnection Customer has separately provided capital apart from the Interconnection Financial Security to finance Pre-Construction Activities for Network Upgrades, the applicable Participating TO(s) will credit the capital provided as if drawn from the Interconnection Financial Security and apply (ii) above.

**9.4.2.3 Between Three Hundred Sixty-Six Days and Five Hundred Forty-Five Days After Final Phase II Interconnection Study Report.**

If, at any time between three hundred sixty-six (366) calendar days and five hundred forty-five (545) calendar days after the date of issuance of the final Phase II Interconnection Study report, the Interconnection Customer withdraws the Interconnection Request or terminates the LGIA, as applicable, in accordance with LGIP Section 9.4.1, the applicable Participating TO(s) shall liquidate the Interconnection Financial Security for Network Upgrades under LGIP Section 9.3 and reimburse the Interconnection Customer in an amount of (i) twenty percent (20%) of the posted value of the Interconnection Financial Security for Network Upgrades, or, (ii) if the Interconnection Financial Security has been drawn down to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer, the lesser of remaining balance of the Interconnection Financial Security or the amount calculated under (i) above. If the Interconnection Customer has separately provided capital apart from the Interconnection Financial Security to finance Pre-Construction Activities for Network Upgrades, the applicable Participating TO(s) will credit the capital provided as if drawn from the Interconnection Financial Security and apply (ii) above.

**9.4.2.4 Special Treatment Based on Failure to Obtain Necessary Permit or Authorization from Governmental Authority.**

If, at any time after the posting requirement under LGIP Section 9.3, the Interconnection Customer withdraws the Interconnection Request or terminates the LGIA, as applicable, in accordance with LGIP Section 9.4.1(b), and the Delivery Network Upgrades to be financed by the Interconnection Customer under LGIP Section 7.3 are also to be financed by one or more other Interconnection Customers, then LGIP Section 9.4.2.1 shall apply, except that the Interconnection Customer shall not be reimbursed for its share of any actual costs incurred or irrevocably committed by the applicable Participating TO(s) for Construction Activities.

**9.4.2.5 After Commencement of Construction Activities.**

Except as otherwise provided in LGIP Section 9.4.2.4, once Construction Activities on Network Upgrades on behalf of the Interconnection Customer commence, any withdrawal of the Interconnection Request or termination of the LGIA by the Interconnection Customer will be treated in accordance with this LGIP Section 9.4.

**9.4.2.6 Notification to CAISO and Accounting by Applicable Participating TO(s).**

The applicable Participating TO(s) must notify the CAISO within one (1) Business Day of liquidating any Interconnection Financial Security. Within twenty (20) calendar days of any liquidating event, the applicable Participating TO(s) must provide the CAISO and Interconnection Customer with an accounting of the disposition of the proceeds of the liquidated Interconnection Financial Security and remit to the CAISO all proceeds not otherwise reimbursed to the Interconnection Customer or applied to costs incurred or irrevocably committed by the applicable Participating TO(s) on behalf of the Interconnection Customer in accordance with this LGIP Section 9.4. All non-refundable portions of the Interconnection Financial Security remitted to the CAISO in accordance with this LGIP Section 9.4 shall be treated in accordance with CAISO Tariff Section 37.9.4.

**Section 10 Engineering & Procurement (“E&P”) Agreement.**

Prior to executing an LGIA, an Interconnection Customer may, in order to advance the implementation of its interconnection, request and the applicable Participating TO(s) shall offer the Interconnection Customer, an E&P Agreement that authorizes the applicable Participating TO(s) to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. However, the applicable Participating TO(s) shall not be obligated to offer an E&P Agreement if the Interconnection Customer is in Dispute Resolution as a result of an allegation that the Interconnection Customer has failed to meet any milestones or comply with any prerequisites specified in other parts of the LGIP. The E&P Agreement is an optional procedure. The E&P Agreement shall provide for the Interconnection Customer to pay the cost of all activities authorized by the Interconnection Customer and to make advance payments or provide other satisfactory security for such costs.

The Interconnection Customer shall pay the cost of such authorized activities and any cancellation costs for equipment that is already ordered for its interconnection, which cannot be mitigated as hereafter described, whether or not such items or equipment later become unnecessary. If the Interconnection Customer withdraws its application for interconnection or either Party terminates the E&P Agreement, to the extent the equipment ordered can be canceled under reasonable terms, the Interconnection Customer shall be obligated to pay the associated cancellation costs. To the extent that the equipment cannot be reasonably canceled, the applicable Participating TO(s) may elect: (i) to take title to the equipment, in which event the applicable Participating TO(s) shall refund the Interconnection Customer any amounts paid by Interconnection Customer for such equipment and shall pay the cost of delivery of such equipment, or (ii) to transfer title to and deliver such equipment to the Interconnection Customer, in which event the Interconnection Customer shall pay any unpaid balance and cost of delivery of such equipment.



**Section 11 Large Generator Interconnection Agreement (LGIA).**

**11.1 Tender.**

**11.1.1** Within fifteen (15) Business Days after the CAISO provides the final Phase II Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s) and the CAISO shall tender a draft LGIA, together with draft appendices. The draft LGIA shall be in the form of the FERC-approved form of LGIA set forth in CAISO Tariff Appendix Z. The Interconnection Customer shall provide written comments, or notification of no comments, to the draft appendices to the applicable Participating TO(s) and the CAISO within (30) calendar days of receipt.

**11.1.2** Consistent with LGIP Sections 13.3 and 11.1.1, when the transmission system of a Participating TO, in which the Point of Interconnection is not located, is affected, such Participating TO shall tender a separate agreement, in the form of the LGIA, as appropriately modified.

**11.2 Negotiation.**

Notwithstanding LGIP Section 11.1, at the request of the Interconnection Customer, the applicable Participating TO(s) and CAISO shall begin negotiations with the Interconnection Customer concerning the appendices to the LGIA at any time after the CAISO provides the Interconnection Customer with the final Phase II Interconnection Study report. The applicable Participating TO(s) and CAISO and the Interconnection Customer shall negotiate concerning any disputed provisions of the appendices to the draft LGIA for not more than ninety (90) calendar days after the CAISO provides the Interconnection Customer with the final Phase II Interconnection Study report. If the Interconnection Customer determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the draft LGIA pursuant to LGIP Section 11.1 and request submission of the unexecuted LGIA with FERC or initiate Dispute Resolution procedures pursuant to LGIP Section 13.5. If the Interconnection Customer requests termination of the negotiations, but, within ninety (90) calendar days after issuance of the final Phase II Interconnection Study report, fails to request either the filing of the unexecuted LGIA or initiate Dispute Resolution, it shall be deemed to have withdrawn its Interconnection Request. Unless otherwise agreed by the Parties, if the Interconnection Customer has not executed and returned the LGIA, requested filing of an unexecuted LGIA, or initiated Dispute Resolution procedures pursuant to LGIP Section 13.5 within ninety (90) calendar days after issuance of the final Phase II Interconnection Study report, it shall be deemed to have withdrawn its Interconnection Request. The applicable Participating TO(s) and CAISO shall provide to the Interconnection Customer a final LGIA within fifteen (15) Business Days after the completion of the negotiation process.

**11.3 Execution and Filing.**

The Interconnection Customer shall either: (i) execute the appropriate number of originals of the tendered LGIA as specified in the directions provided by the CAISO and return them to the CAISO, as directed, for completion of the execution process; or (ii) request in writing that the applicable Participating TO(s) and CAISO file with FERC an LGIA in unexecuted form. The LGIA shall be considered executed as of the date that all three Parties have signed the LGIA. As soon as practicable, but not later than ten (10) Business Days after receiving either the executed originals of the tendered LGIA (if it does not conform with a FERC-approved standard form of interconnection agreement) or the request to file an unexecuted LGIA, the applicable Participating TO(s) and CAISO shall file the LGIA with FERC, as necessary, together with an explanation of any matters as to which the Interconnection Customer and the applicable Participating TO(s) or CAISO disagree and support for the costs that the applicable Participating TO(s) propose to charge to the Interconnection Customer under the LGIA. An unexecuted LGIA should contain terms and conditions deemed appropriate by the applicable Participating TO(s) and CAISO for the Interconnection Request. If the Parties agree to proceed with design, procurement, and construction of facilities and upgrades under the agreed-upon terms of the unexecuted LGIA, they may proceed pending FERC action.

**11.4 Commencement of Interconnection Activities.**

If the Interconnection Customer executes the final LGIA, the applicable Participating TO(s), CAISO and the Interconnection Customer shall perform their respective obligations in accordance with the terms of the LGIA, subject to modification by FERC. Upon submission of an unexecuted LGIA, the Interconnection Customer, applicable Participating TO(s) and CAISO may proceed to comply with the unexecuted LGIA, pending FERC action.

**11.5 Interconnection Customer to Meet Requirements of the Participating TO's Interconnection Handbook.**

The Interconnection Customer's Interconnection Facilities shall be designed, constructed, operated and maintained in accordance with the applicable Participating TO's Interconnection Handbook.

**Section 12 Construction of Participating TO's Interconnection Facilities and Network Upgrades, and Funding of Network Upgrades.**

**12.1 Schedule.**

The applicable Participating TO(s) and the Interconnection Customer shall negotiate in good faith concerning a schedule for the construction of the applicable Participating TO's Interconnection Facilities and the Network Upgrades.

## **12.2 Construction Sequencing.**

### **12.2.1 General.**

In general, the sequence of construction of Stand Alone Network Upgrades or other Network Upgrades for a single Interconnection Request, or Network Upgrades identified for the interconnection of Generating Facilities associated with multiple Interconnection Requests, shall be determined, to the maximum extent practical, in a manner that accommodates the proposed Commercial Operation Date set forth in the LGIA of the Interconnection Customer(s) associated with the Stand Alone Network Upgrades or other Network Upgrades.

### **12.2.2 Construction of Network Upgrades that are or were an Obligation of an Entity other than the Interconnection Customer.**

The applicable Participating TO(s) shall be responsible for financing and constructing any Network Upgrades necessary to support the interconnection of the Generating Facility of an Interconnection Customer with an LGIA under this LGIP, whenever either:

- (i) the Network Upgrades were included in the Interconnection Base Case Data for a Phase II Interconnection Study on the basis that they were Network Upgrades associated with Generating Facilities of Interconnection Customers that have an executed LGIA (or its equivalent predecessor agreement) or unexecuted LGIA (or its equivalent predecessor agreement) filed with FERC, but the Network Upgrades will not otherwise be completed because such LGIA or equivalent predecessor agreement was subsequently terminated or the Interconnection Request has otherwise been withdrawn; or
- (ii) the Network Upgrades were included in the Interconnection Base Case Data for a Phase II Interconnection Study on the basis that they were Network Upgrades associated with Generating Facilities of Interconnection Customers that have an executed LGIA (or its equivalent predecessor agreement) or unexecuted LGIA (or its equivalent predecessor agreement) filed with FERC, but the Network Upgrades will not otherwise be completed in time to support the Interconnection Customer's In-Service Date because construction has not commenced in accordance with the terms of such LGIA (or its equivalent predecessor agreement).

The obligation under this LGIP Section 12.2.2 arises only after the CAISO, in coordination with the applicable Participating TO(s), determines that the Network Upgrades remain needed to support the interconnection of the Interconnection Customer's Generating Facility notwithstanding, as applicable, the absence or delay of the Generating Facility that is contractually, or was previously contractually, associated with the Network Upgrades.

Further, to the extent the timing of such Network Upgrades was not accounted for in determining a reasonable Commercial Operation Date among the CAISO, applicable Participating TO(s), and the Interconnection Customer as part of the Phase II Interconnection Study, the applicable Participating TO(s) will use Reasonable Efforts to ensure that the construction of such Network Upgrades can accommodate the Interconnection Customer's proposed Commercial Operation Date. If, despite Reasonable Efforts, it is anticipated that the Network Upgrades cannot be constructed in time to accommodate the Interconnection Customer's proposed Commercial Operation Date, the Interconnection Customer may commit to pay the applicable Participating TO(s) any costs associated with expediting construction of the Network Upgrades to meet the original proposed Commercial Operation Date. The expediting costs under this LGIP Section 12.2.2 shall be in addition to the Interconnection Customer's cost responsibility assigned under LGIP Section 6.3.

**12.2.3 Advancing Construction of Network Upgrades that are Part of the CAISO's Transmission Plan.**

An Interconnection Customer with an LGIA, in order to maintain its In-Service Date as specified in the LGIA, may request that the CAISO and applicable Participating TO(s) advance to the extent necessary the completion of Network Upgrades that: (i) are necessary to support such In-Service Date and (ii) would otherwise not be completed, pursuant to an approved CAISO Transmission Plan covering the PTO Service Territory of the applicable Participating TO(s), in time to support such In-Service Date. Upon such request, the applicable Participating TO(s) will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay the applicable Participating TO(s) any associated expediting costs. The Interconnection Customer shall be entitled to refunds, if any, in accordance with this LGIP and the LGIA, for any expediting costs paid.

**12.3 Network Upgrades.**

**12.3.1 Initial Funding.**

Unless the applicable Participating TO(s) elects to fund the full capital for identified Reliability and Delivery Network Upgrades, they shall be funded by the Interconnection Customer(s) either by means of drawing down the Interconnection Financial Security or by the provision of additional capital, at each Interconnection Customer's election, up to a maximum amount no greater than that established by the cost responsibility assigned to each Interconnection Customer(s) under LGIP Sections 7.3 and 7.4.

Where the applicable Participating TO(s) does not elect to fund the full capital for specific Reliability and Delivery Network Upgrades, the applicable Participating TO(s) shall be responsible for funding any capital costs for the Reliability and Delivery Network Upgrades that exceed the total cost responsibility assigned to the Interconnection Customer(s) under LGIP Sections 7.3 and 7.4.

- (a) Where the funding responsibility for any Reliability Network Upgrade or Delivery Network Upgrade has been assigned to a single Interconnection Customer in accordance with this LGIP, and the applicable Participating TO(s) has elected not to fund the full capital of the Reliability Network Upgrade or Delivery Network Upgrade, the applicable Participating TO(s) shall invoice the Interconnection Customer under LGIA Article 12.1 up to a maximum amount no greater than that established by the cost responsibility assigned to each Interconnection Customer(s) under LGIP Sections 7.3 and 7.4 for the Reliability Network Upgrade or Delivery Network Upgrade, respectively.
- (b) Where the funding responsibility for a Reliability Network Upgrade has been assigned to more than one Interconnection Customer in accordance with this LGIP, and the applicable Participating TO(s) has elected not to fund the full capital of the Reliability Network Upgrade, the applicable Participating TO(s) shall invoice each Interconnection Customer under LGIA Article 12 for such Reliability Network Upgrade based on the ratio of the maximum megawatt electrical output of each new Large Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed the Generating Facility's Interconnection Request to the aggregate maximum megawatt electrical output of all such new Large Generating Facilities and increases in the generating capacity of existing Generating Facilities assigned responsibility for such Reliability Network Upgrade. Each Interconnection Customer may be invoiced up to a maximum amount no greater than that established by the cost responsibility assigned to that Interconnection Customer under LGIP Section 7.3.
- (c) Where the funding responsibility for a Delivery Network Upgrade has been assigned to more than one Interconnection Customer in accordance with this LGIP, and the applicable Participating TO(s) has elected not to fund the full capital of the Delivery Network Upgrade, the applicable Participating TO(s) shall invoice each Interconnection Customer under LGIA Article 12 for such Delivery Network Upgrade based on the percentage flow impact of each assigned Large Generating Facility on each Delivery Network Upgrade as determined by the Generation distribution factor methodology used in the On-Peak and Off-Peak Deliverability Assessments performed in the Phase II Interconnection Study. Each Interconnection Customer may be invoiced up to a maximum amount no greater than that established by the cost responsibility assigned to that Interconnection Customer under LGIP Section 7.4.

Any permissible extension of the Commercial Operation Date of a Large Generating Facility will not alter the Interconnection Customer's obligation to finance Network Upgrades where the Network Upgrades are required to meet the earlier Commercial Operation Date(s) of other Large Generating Facilities that have also been assigned cost responsibility for the Network Upgrades.

**12.3.2 Repayment of Amounts Advanced for Network Upgrades and Refund of Interconnection Financial Security.**

Upon the Commercial Operation Date of the Large Generating Facility, which shall be the Commercial Operation Date of the entire Large Generating Facility, if phased, the Interconnection Customer shall be entitled to a repayment for the Interconnection Customer's contribution to the cost of Network Upgrades in accordance with its cost responsibility assigned under LGIP Sections 7.3 and 7.4. Such amount shall be paid to the Interconnection Customer by the applicable Participating TO(s) on a dollar-for-dollar basis either through (1) direct payments made on a levelized basis over the five-year period commencing on the Large Generating Facility's Commercial Operation Date; or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years of the Commercial Operation Date. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment. The Interconnection Customer may assign such repayment rights to any person.

Instead of direct payments, the Interconnection Customer may elect to receive Merchant Transmission Congestion Revenue Rights (CRRs) in accordance with the CAISO Tariff Section 36.11 associated with the Network Upgrades, or portions thereof that were funded by the Interconnection Customer. Such CRRs would take effect upon the Commercial Operation Date of the Large Generating Facility, which shall be the Commercial Operation Date of the entire Large Generating Facility, if phased, in accordance with the LGIA.

**12.4 Special Provisions for Affected Systems and Other Affected Participating TOs.**

The Interconnection Customer shall enter into an agreement with the owner of the Affected System and/or other affected Participating TO(s), as applicable. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to the owner of the Affected System and/or other affected Participating TO(s) as well as the repayment by the owner of the Affected System and/or other affected Participating TO(s). If the affected entity is another Participating TO, the initial form of agreement will be the LGIA, as appropriately modified.

Any repayment by the owner of the Affected System shall be in accordance with FERC Order No. 2003-B (109 FERC ¶ 61,287).

**Section 13 Miscellaneous.**

**13.1 Confidentiality.**

Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Parties receiving the information that the information is confidential.

If requested by any Party, the other Parties shall provide in writing, the basis for asserting that the information referred to in this Section warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

The confidentiality provisions of this LGIP are limited to information provided pursuant to this LGIP.

#### **13.1.1 Scope.**

Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or breach of the LGIA; or (6) is required, in accordance with LGIP Section 13.1.6, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the LGIP. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

#### **13.1.2 Release of Confidential Information.**

No Party shall release or disclose Confidential Information to any other person, except to its employees, consultants, Affiliates (limited by FERC's Standards of Conduct requirements set forth in Part 358 of FERC's Regulations, 18 C.F.R. 358), or to parties who may be or considering providing financing to or equity participation with the Interconnection Customer, or to potential purchasers or assignees of the Interconnection Customer, on a need-to-know basis in connection with these procedures, unless such person has first been advised of the confidentiality provisions of this LGIP Section 13.1 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this LGIP Section 13.1.

**13.1.3 Rights.**

Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Parties. The disclosure by each Party to the other Parties of Confidential Information shall not be deemed a waiver by a Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

**13.1.4 No Warranties.**

By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to the other Parties nor to enter into any further agreements or proceed with any other relationship or joint venture.

**13.1.5 Standard of Care.**

Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under these procedures or its regulatory requirements.

**13.1.6 Order of Disclosure.**

If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Parties with prompt notice of such request(s) or requirement(s) so that the other Parties may seek an appropriate protective order or waive compliance with the terms of the LGIP. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

**13.1.7 Remedies.**

Monetary damages are inadequate to compensate a Party for another Party's breach of its obligations under this LGIP Section 13.1. Each Party accordingly agrees that the other Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party breaches or threatens to breach its obligations under this LGIP Section 13.1, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the breach of this LGIP Section 13.1, but shall be in addition to all other remedies available at law or in equity. Further, the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this LGIP Section 13.1.



**13.1.8 Disclosure to FERC, its Staff, or a State.**

Notwithstanding anything in this LGIP Section 13.1 to the contrary, and pursuant to 18 C.F.R. section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to the LGIP, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. section 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other applicable Parties when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner, consistent with applicable state rules and regulations.

**13.1.9** Subject to the exception in LGIP Section 13.1.8, any Confidential Information shall not be disclosed by the other Parties to any person not employed or retained by the other Parties, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Parties, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this LGIP or as a transmission service provider or a Balancing Authority including disclosing the Confidential Information to an RTO or ISO or to a subregional, regional or national reliability organization or planning group. The Party asserting confidentiality shall notify the other Parties in writing of the information it claims is confidential. Prior to any disclosures of another Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

**13.1.10** This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a breach of this provision).

**13.1.11** The Participating TO or CAISO shall, at the Interconnection Customer's election, destroy, in a confidential manner, or return the Confidential Information provided at the time of Confidential Information is no longer needed.

**13.2 Delegation of Responsibility.**

The CAISO and the Participating TOs may use the services of subcontractors as deemed appropriate to perform their obligations under this LGIP. The applicable Participating TO or CAISO shall remain primarily liable to the Interconnection Customer for the performance of its respective subcontractors and compliance with its obligations of this LGIP. The subcontractor shall keep all information provided confidential and shall use such information solely for the performance of such obligation for which it was provided and no other purpose.

**13.3 [NOT USED]**

**13.4 [NOT USED]**

**13.5 Disputes.**

If an Interconnection Customer disputes withdrawal of its Interconnection Request under LGIP Section 3.8, the CAISO will forward any information regarding the disputed withdrawal received under LGIP Section 3.8 within one (1) Business Day to the LGIP Executive Dispute Committee, consisting of the Vice President responsible for administration of this LGIP, the CAISO Vice President responsible for customer affairs, and an additional Vice President. The LGIP Executive Dispute Committee shall have five (5) Business Days to determine whether or not to restore the Interconnection Request. If the LGIP Executive Dispute Committee concludes that the Interconnection Request should have been withdrawn, the Interconnection Customer may seek relief in accordance with the CAISO ADR Procedures.

All disputes, other than those arising from LGIP Section 3.8, arising out of or in connection with this LGIP whereby relief is sought by or from the CAISO shall be settled in accordance with the CAISO ADR Procedures.

Disputes arising out of or in connection with this LGIP not subject to the CAISO ADR Procedures shall be resolved as follows:

**13.5.1 Submission.**

In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with the LGIA, the LGIP, or their performance, such Party (the "disputing Party") shall provide the other Party with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) calendar days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of the LGIA and LGIP.

**13.5.2 External Arbitration Procedures.**

Any arbitration initiated under these procedures shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) calendar days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) calendar days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules") and any applicable FERC regulations or RTO rules; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this LGIP Section 13.5, the terms of this LGIP Section 13.5 shall prevail.

**13.5.3 Arbitration Decisions.**

Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) calendar days of appointment and shall notify the Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of the LGIA and LGIP and shall have no power to modify or change any provision of the LGIA and LGIP in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

**13.5.4 Costs.**

Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

### **13.6 Local Furnishing Bonds.**

#### **13.6.1 Participating TOs That Own Facilities Financed by Local Furnishing Bonds.**

This provision is applicable only to a Participating TO that has financed facilities for the local furnishing of electric energy with Local Furnishing Bonds. Notwithstanding any other provisions of this LGIP, the Participating TO and the CAISO shall not be required to provide Interconnection Service to the Interconnection Customer pursuant to this LGIP and the LGIA if the provision of such Interconnection Service would jeopardize the tax-exempt status of any Local Furnishing Bond(s) issued for the benefit of the Participating TO.

#### **13.6.2 Alternative Procedures for Requesting Interconnection Service.**

If a Participating TO determines that the provision of Interconnection Service requested by the Interconnection Customer would jeopardize the tax-exempt status of any Local Furnishing Bond(s) issued for the benefit of the Participating TO, it shall advise the Interconnection Customer and the CAISO within (30) calendar days of receipt of the Interconnection Request.

The Interconnection Customer thereafter may renew its request for the same interconnection Service by tendering an application under Section 211 of the Federal Power Act, in which case the Participating TO, within ten (10) calendar days of receiving a copy of the Section 211 application, will waive its rights to a request for service under Section 213(a) of the Federal Power Act and to the issuance of a proposed order under Section 212(c) of the Federal Power Act, and the CAISO and Participating TO shall provide the requested Interconnection Service pursuant to the terms and conditions set forth in this LGIP and the LGIA.

### **13.7 Change in CAISO Operational Control.**

If the CAISO no longer has control of the portion of the CAISO Controlled Grid at the Point of Interconnection during the period when an Interconnection Request is pending, the CAISO shall transfer to the applicable former Participating TO or successor entity which has ownership of the Point of Interconnection any amount of the deposit or payment with interest thereon that exceeds the cost that it incurred to evaluate the request for interconnection. Any difference between such net deposit amount and the costs that the former Participating TO or successor entity incurs to evaluate the request for interconnection shall be paid by or refunded to the Interconnection Customer, as appropriate. The CAISO shall coordinate with the applicable former Participating TO or successor entity which has ownership of the Point of Interconnection to complete any Interconnection Study, as appropriate, that the CAISO has begun but has not completed. If the CAISO has tendered a draft LGIA to the Interconnection Customer but the Interconnection Customer has neither executed the LGIA nor requested the filing of an unexecuted LGIA with FERC, unless otherwise provided, the Interconnection Customer must complete negotiations with the applicable former Participating TO or successor entity which has the ownership of the Point of Interconnection.

**APPENDIX 1 to LGIP  
INTERCONNECTION REQUEST**

Provide three copies of this completed form pursuant to Section 7 of this LGIP Appendix 1 below.

1. The undersigned Interconnection Customer submits this request to interconnect its Large Generating Facility with the CAISO Controlled Grid pursuant to the CAISO Tariff.
2. This Interconnection Request is for (check one):  
\_\_\_\_\_ A proposed new Large Generating Facility.  
\_\_\_\_\_ An increase in the generating capacity or a Material Modification to an existing Generating Facility.
3. Requested Deliverability Status is for (check one):  
 Full Capacity  
 Energy Only
4. The Interconnection Customer provides the following information:
  - a. Address or location, including the county, of the proposed new Large Generating Facility site or, in the case of an existing Generating Facility, the name and specific location, including the county, of the existing Generating Facility;  
  
Project Name:  
  
Project Location:  
Street Address:  
City, State:  
County:  
Zip Code:
  - b. Maximum megawatt electrical output of the proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity of an existing Generating Facility;  
  
Maximum megawatt electrical output (Net MW):                      or  
Megawatt increase (Net MW):



5. Applicable deposit amount as specified in the LGIP made payable to California ISO. Send check to CAISO along with the:
1. Appendix 1 to LGIP (Interconnection Request) for processing.
  2. Attachment A to Appendix 1 (Interconnection Request Large Generating Facility Data).

6. Evidence of Site Exclusivity as specified in the LGIP and name(s), address(es) and contact information of site owner(s) (check one):

Is attached to this Interconnection Request  
 Deposit in lieu of Site Exclusivity attached, Site Exclusivity will be provided at a later date in accordance with this LGIP

7. This Interconnection Request shall be submitted to the representative indicated below:

New Resource Interconnection  
California ISO  
P.O. Box 639014  
Folsom, CA 95763-9014

Overnight address: 151 Blue Ravine Road, Folsom, CA 95630

8. Representative of the Interconnection Customer to contact:

[To be completed by the Interconnection Customer]

Name:

Title:

Company Name:

Street Address:

City, State:

Zip Code:

Phone Number:

Fax Number:

Email Address:

9. This Interconnection Request is submitted by:

Legal name of the Interconnection Customer:

By (signature):

Name (type or print):

Title:

Date:

**Attachment A  
To LGIP Appendix 1  
Interconnection Request**

**LARGE GENERATING FACILITY DATA**

Provide three copies of this completed form pursuant to Section 7 of LGIP Appendix 1.

- 1. Provide two original prints and one reproducible copy (no larger than 36" x 24") of the following:**
  - A. Site drawing to scale, showing generator location and Point of Interconnection with the CAISO Controlled Grid.
  - B. Single-line diagram showing applicable equipment such as generating units, step-up transformers, auxiliary transformers, switches/disconnects of the proposed interconnection, including the required protection devices and circuit breakers. For wind generator farms, the one line diagram should include the distribution lines connecting the various groups of generating units, the generator capacitor banks, the step up transformers, the distribution lines, and the substation transformers and capacitor banks at the Point of Interconnection with the CAISO Controlled Grid.
  
- 2. Generating Facility Information**
  - A. Total Generating Facility rated output (kW): \_\_\_\_\_
  - B. Generating Facility auxiliary Load (kW): \_\_\_\_\_
  - C. Project net capacity (kW): \_\_\_\_\_
  - D. Standby Load when Generating Facility is off-line (kW): \_\_\_\_\_
  - E. Number of Generating Units: \_\_\_\_\_  
(Please repeat the following items for each generator)
  - F. Individual generator rated output (kW for each unit): \_\_\_\_\_
  - G. Manufacturer: \_\_\_\_\_
  - H. Year Manufactured: \_\_\_\_\_
  - I. Nominal Terminal Voltage: \_\_\_\_\_
  - J. Rated Power Factor (%): \_\_\_\_\_
  - K. Type (Induction, Synchronous, D.C. with Inverter): \_\_\_\_\_
  - L. Phase (3 phase or single phase): \_\_\_\_\_
  - M. Connection (Delta, Grounded WYE, Ungrounded WYE, impedance grounded): \_\_\_\_\_
  - N. Generator Voltage Regulation Range: \_\_\_\_\_
  - O. Generator Power Factor Regulation Range: \_\_\_\_\_
  - P. For combined cycle plants, specify the plant output for an outage of the steam turbine or an outage of a single combustion turbine: \_\_\_\_\_



**3. Synchronous Generator – General Information:**

(Please repeat the following for each generator)

- A. Rated Generator speed (rpm): \_\_\_\_\_
- B. Rated MVA: \_\_\_\_\_
- C. Rated Generator Power Factor: \_\_\_\_\_
- D. Generator Efficiency at Rated Load (%): \_\_\_\_\_
- E. Moment of Inertia (including prime mover): \_\_\_\_\_
- F. Inertia Time Constant (on machine base) H: \_\_\_\_\_ sec or MJ/MVA
- G. SCR (Short-Circuit Ratio - the ratio of the field current required for rated open-circuit voltage to the field current required for rated short-circuit current): \_\_\_\_\_
- H. Please attach generator reactive capability curves.
- I. Rated Hydrogen Cooling Pressure in psig (Steam Units only): \_\_\_\_\_
- J. Please attach a plot of generator terminal voltage versus field current that shows the air gap line, the open-circuit saturation curve, and the saturation curve at full load and rated power factor.

**4. Excitation System Information**

(Please repeat the following for each generator)

- A. Indicate the Manufacturer \_\_\_\_\_ and Type \_\_\_\_\_ of excitation system used for the generator. For exciter type, please choose from 1 to 8 below or describe the specific excitation system.
  - (1) Rotating DC commutator exciter with continuously acting regulator. The regulator power source is independent of the generator terminal voltage and current.
  - (2) Rotating DC commutator exciter with continuously acting regulator. The regulator power source is bus fed from the generator terminal voltage.
  - (3) Rotating DC commutator exciter with non-continuously acting regulator (i.e., regulator adjustments are made in discrete increments).
  - (4) Rotating AC Alternator Exciter with non-controlled (diode) rectifiers. The regulator power source is independent of the generator terminal voltage and current (not bus-fed).
  - (5) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers. The regulator power source is fed from the exciter output voltage.
  - (6) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers.
  - (7) Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from the generator terminal voltage.
  - (8) Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from a combination of generator terminal voltage and current (compound-source controlled rectifiers system).
- B. Attach a copy of the block diagram of the excitation system from its instruction manual. The diagram should show the input, output, and all feedback loops of the excitation system.
- C. Excitation system response ratio (ASA): \_\_\_\_\_
- D. Full load rated exciter output voltage: \_\_\_\_\_
- E. Maximum exciter output voltage (ceiling voltage): \_\_\_\_\_
- F. Other comments regarding the excitation system?

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**5. Power System Stabilizer Information.**

(Please repeat the following for each generator. All new generators are required to install PSS unless an exemption has been obtained from WECC. Such an exemption can be obtained for units that do not have suitable excitation systems.)

- A. Manufacturer: \_\_\_\_\_
- B. Is the PSS digital or analog? \_\_\_\_\_
- C. Note the input signal source for the PSS?  
\_\_\_\_\_ Bus frequency \_\_\_\_\_ Shaft speed \_\_\_\_\_ Bus Voltage  
\_\_\_\_\_ Other (specify source)
- D. Please attach a copy of a block diagram of the PSS from the PSS Instruction Manual and the correspondence between dial settings and the time constants or PSS gain.
- E. Other comments regarding the PSS?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**6. Turbine-Governor Information**

(Please repeat the following for each generator)

Please complete Part A for steam, gas or combined-cycle turbines, Part B for hydro turbines, and Part C for both.

- A. Steam, gas or combined-cycle turbines:
  - (1) List type of unit (Steam, Gas, or Combined-cycle): \_\_\_\_\_
  - (2) If steam or combined-cycle, does the turbine system have a reheat process (i.e., both high and low pressure turbines)? \_\_\_\_\_
  - (3) If steam with reheat process, or if combined-cycle, indicate in the space provided, the percent of full load power produced by each turbine:  
Low pressure turbine or gas turbine: \_\_\_\_\_ %  
High pressure turbine or steam turbine: \_\_\_\_\_ %
- B. Hydro turbines:
  - (1) Turbine efficiency at rated load: \_\_\_\_\_ %
  - (2) Length of penstock: \_\_\_\_\_ ft
  - (3) Average cross-sectional area of the penstock: \_\_\_\_\_ ft<sup>2</sup>
  - (4) Typical maximum head (vertical distance from the bottom of the penstock, at the gate, to the water level): \_\_\_\_\_ ft
  - (5) Is the water supply run-of-the-river or reservoir: \_\_\_\_\_
  - (6) Water flow rate at the typical maximum head: \_\_\_\_\_ ft<sup>3</sup>/sec
  - (7) Average energy rate: \_\_\_\_\_ kW-hrs/acre-ft
  - (8) Estimated yearly energy production: \_\_\_\_\_ kW-hrs

C. Complete this section for each machine, independent of the turbine type.

- (1) Turbine manufacturer: \_\_\_\_\_
- (2) Maximum turbine power output: \_\_\_\_\_ MW
- (3) Minimum turbine power output (while on line): \_\_\_\_\_ MW
- (4) Governor information:
  - (a) Droop setting (speed regulation): \_\_\_\_\_
  - (b) Is the governor mechanical-hydraulic or electro-hydraulic (Electro-hydraulic governors have an electronic speed sensor and transducer.)?  
\_\_\_\_\_
  - (c) Other comments regarding the turbine governor system?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**7. Synchronous Generator and Associated Equipment – Dynamic Models:**

For each generator, governor, exciter and power system stabilizer, select the appropriate dynamic model from the General Electric PSLF Program Manual and provide the required input data. The manual is available on the GE website at [www.gepower.com](http://www.gepower.com). Select the following links within the website: 1) Our Businesses, 2) GE Power Systems, 3) Energy Consulting, 4) GE PSLF Software, 5) GE PSLF User's Manual.

There are links within the GE PSLF User's Manual to detailed descriptions of specific models, a definition of each parameter, a list of the output channels, explanatory notes, and a control system block diagram. The block diagrams are also available on the CAISO Website.

If you require assistance in developing the models, we suggest you contact General Electric. Accurate models are important to obtain accurate study results. Costs associated with any changes in facility requirements that are due to differences between model data provided by the generation developer and the actual generator test data, may be the responsibility of the generation developer.

**8. Induction Generator Data:**

- A. Rated Generator Power Factor at rated load: \_\_\_\_\_
- B. Moment of Inertia (including prime mover): \_\_\_\_\_
- C. Do you wish reclose blocking? Yes \_\_\_\_, No \_\_\_\_  
Note: Sufficient capacitance may be on the line now, or in the future, and the generator may self-excite unexpectedly.

**9. Generator Short Circuit Data**

For each generator, provide the following reactances expressed in p.u. on the generator base:

- $X''1$  – positive sequence subtransient reactance: \_\_\_\_\_
- $X''2$  – negative sequence subtransient reactance: \_\_\_\_\_
- $X''0$  – zero sequence subtransient reactance: \_\_\_\_\_

Generator Grounding:

- A. \_\_\_\_\_ Solidly grounded
- B. \_\_\_\_\_ Grounded through an impedance  
Impedance value in p.u. on generator base. R: \_\_\_\_\_ p.u.  
X: \_\_\_\_\_ p.u.
- C. \_\_\_\_\_ Ungrounded

**10. Step-Up Transformer Data**

For each step-up transformer, fill out the data form provided in Table 1.

**11. Line Data**

There is no need to provide data for new lines that are to be planned by the Participating TO. However, for transmission lines that are to be planned by the generation developer, please provide the following information:

Nominal Voltage: \_\_\_\_\_  
Line Length (miles): \_\_\_\_\_  
Line termination Points: \_\_\_\_\_  
Conductor Type: \_\_\_\_\_ Size: \_\_\_\_\_  
If bundled. Number per phase: \_\_\_\_\_, Bundle spacing: \_\_\_\_\_ in.  
Phase Configuration. Vertical: \_\_\_\_\_, Horizontal: \_\_\_\_\_  
Phase Spacing (ft): A-B: \_\_\_\_\_, B-C: \_\_\_\_\_, C-A: \_\_\_\_\_  
Distance of lowest conductor to Ground: \_\_\_\_\_ ft  
Ground Wire Type: \_\_\_\_\_ Size: \_\_\_\_\_ Distance to Ground: \_\_\_\_\_ ft  
Attach Tower Configuration Diagram  
Summer line ratings in amperes (normal and emergency) \_\_\_\_\_  
Resistance ( R ): \_\_\_\_\_ p.u.\*\*  
Reactance: ( X ): \_\_\_\_\_ p.u.\*\*  
Line Charging (B/2): \_\_\_\_\_ p.u.\*\*  
\*\* On 100-MVA and nominal line voltage (kV) Base

**12. Wind Generators**

Number of generators to be interconnected pursuant to this Interconnection Request: \_\_\_\_\_

Elevation: \_\_\_\_\_ Single Phase \_\_\_\_\_ Three Phase

Inverter manufacturer, model name, number, and version:  
\_\_\_\_\_

List of adjustable setpoints for the protective equipment or software:  
\_\_\_\_\_

Field Volts: \_\_\_\_\_

Field Amperes: \_\_\_\_\_

Motoring Power (kW): \_\_\_\_\_

Neutral Grounding Resistor (If Applicable): \_\_\_\_\_

$I_2^2t$  or K (Heating Time Constant): \_\_\_\_\_

Rotor Resistance: \_\_\_\_\_

Stator Resistance: \_\_\_\_\_

Stator Reactance: \_\_\_\_\_

Rotor Reactance: \_\_\_\_\_

Magnetizing Reactance: \_\_\_\_\_

Short Circuit Reactance: \_\_\_\_\_

Exciting Current: \_\_\_\_\_

Temperature Rise: \_\_\_\_\_

Frame Size: \_\_\_\_\_

Design Letter: \_\_\_\_\_

Reactive Power Required In Vars (No Load): \_\_\_\_\_

Reactive Power Required In Vars (Full Load): \_\_\_\_\_

Total Rotating Inertia, H: \_\_\_\_\_ Per Unit on KVA Base

Note: A completed General Electric Company Power Systems Load Flow (PSLF) data sheet must be supplied with the Interconnection Request. If other data sheets are more appropriate to the proposed device then they shall be provided and discussed at Scoping Meeting.

TABLE 1  
 TRANSFORMER DATA

UNIT \_\_\_\_\_

NUMBER OF TRANSFORMERS \_\_\_\_\_ PHASE \_\_\_\_\_

| RATED KVA   | H Winding | X Winding | Y Winding |
|---|-----------|-----------|-----------|
| Connection<br>(Delta, Wye, Gnd.)                                | _____     | _____     | _____     |
| 55 C Rise   | _____     | _____     | _____     |
| 65 C Rise   | _____     | _____     | _____     |
| RATED VOLTAGE   | _____     | _____     | _____     |
| BIL   | _____     | _____     | _____     |
| AVAILABLE TAPS<br>(planned or existing)                         | _____     | _____     | _____     |
| LOAD TAP CHANGER?   | _____     | _____     | _____     |
| TAP SETTINGS  | _____     | _____     | _____     |
| COOLING TYPE : OA _____ OA/FA _____ OA/FA/FA _____ OA/FOA _____ |           |           |           |
| IMPEDANCE   | H-X       | H-Y       | X-Y       |
| Percent   | _____     | _____     | _____     |
| MVA Base  | _____     | _____     | _____     |
| Tested Taps   | _____     | _____     | _____     |
| WINDING RESISTANCE  | H         | X         | Y         |
| Ohms  | _____     | _____     | _____     |

CURRENT TRANSFORMER RATIOS

H \_\_\_\_\_ X \_\_\_\_\_ Y \_\_\_\_\_ N \_\_\_\_\_

PERCENT EXCITING CURRENT 100 % Voltage; \_\_\_\_\_ 110% Voltage \_\_\_\_\_

Supply copy of nameplate and manufacture's test report when available

**Appendix 2 to**  
**Large Generator Interconnection Procedures (LGIP)**  
**Relating to the Transition Cluster**

**Section 1. Objective, Applicability and Definitions.**

**1.1 Objective and Applicability.**

The objective of this Appendix 2 to the Large Generator Interconnection Procedures (LGIP) is to implement the requirements for interconnecting to the CAISO Controlled Grid those Generating Facilities assigned to the Transition Cluster. All Interconnection Requests assigned to the Transition Cluster shall be deemed to have been assigned to a Queue Cluster Window for purposes of LGIP Section 1.1 and therefore all provisions of the LGIP apply to Generating Facilities included in the Transition Cluster, except as set forth herein.

**1.2 Definitions.**

**1.2.1 Master Definitions Supplement and Other General Definition Rules.**

Unless the context otherwise requires, any word or expression defined in the Master Definitions Supplement, Appendix A to the CAISO Tariff, shall have the same meaning where used in this Appendix 2 to the LGIP. Further, unless the context otherwise requires, any word or expression defined in LGIP Section 1.2 shall have the same meaning where used in this Appendix 2 to the LGIP. References to LGIP in this Appendix 2 are to Appendix Y of the CAISO Tariff.

**1.2.2 Special Definitions for this LGIP Appendix 2.**

In this Appendix 2 to the LGIP, the following words and expressions shall have the meanings set opposite them:

**“Serial Study Group”** shall mean the collection of valid Interconnection Requests with an assigned Queue Position on or before June 1, 2008 studied in accordance with the interconnection procedures set forth in the version of the LGIP set forth in CAISO Tariff Appendix U as permitted by the decision of FERC in Docket No. ER08-960-000.

**“Transition Cluster”** shall mean the collection of valid Interconnection Requests with an assigned Queue Position on or before June 1, 2008 that were not included as part of the Serial Study Group by the decision of FERC in Docket No. ER08-960-000.

**“Transition Cluster Interconnection Study Deposit”** shall mean, for each Interconnection Request in the Transition Cluster other than those subject to Section 3.2 of this Appendix 2 to the LGIP, the difference between (i) \$250,000 and (ii) the total amount the Interconnection Customer has been charged for Interconnection Studies performed under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement plus the balance of any remaining deposit provided under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement. For an Interconnection Request subject to Section 3.2 of this Appendix 2 to the LGIP, the amount of the Transition Cluster Interconnection Study Deposit shall be the difference between (i) \$100,000 and (ii) the total amount the Interconnection Customer has been charged for Interconnection Studies performed under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement plus the balance of any remaining deposit provided under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement.

**2. Queue Position.**

The Queue Position of any Interconnection Request included in the Transition Cluster shall be deemed to be lower than that of any Interconnection Request included in the Serial Study Group for purposes of performing Interconnection Studies for Large Generating Facilities whose Interconnection Requests are in the Serial Study Group.

**3. Requirements to Remain in the Transition Cluster.**

**3.1 General Requirements for Large Generating Facilities.**

An Interconnection Request deemed to be included in the Transition Cluster in accordance with the decision of FERC in Docket No. ER08-960-000 will be deemed to have been withdrawn from the Transition Cluster unless the Interconnection Customer provides, within sixty (60) calendar days from the effective date of this Appendix 2 to the LGIP, all of the following: (i) a Transition Cluster Interconnection Study Deposit, (ii) a statement of the requested deliverability status, (iii) a preferred Point of Interconnection and voltage level and all other technical data required by the LGIP, if not already submitted to the CAISO, and (iv) demonstration of Site Exclusivity or a posting of a Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity must be, at a minimum, through the anticipated Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility.

Section 3.8 of the LGIP shall not apply to a failure to satisfy the requirements of this Section 3.1 of this Appendix 2 to the LGIP.



**3.2 Special Requirements for Certain Small and Existing Large Generating Facilities.**

An Interconnection Customer with an Interconnection Request in the Transition Cluster relating to (a) a Small Generating Facility seeking a Deliverability Assessment or (b) a Generating Facility, subject to the LGIP in accordance with CAISO Tariff Section 25.1.1, that has achieved Commercial Operation prior to the date of the Interconnection Request, and is seeking to increase the capacity of the Generating Facility by less than 20 MW, will be deemed to have withdrawn its Interconnection Request from the Transition Cluster unless it provides, within sixty (60) calendar days from the effective date of this Appendix 2 to the LGIP, all of the following: (i) a Transition Cluster Interconnection Study Deposit, (ii) a statement of the requested deliverability status, (iii) a preferred Point of Interconnection and voltage level and all other technical data required by the LGIP, if not already submitted to the CAISO, and (iv) demonstration of Site Exclusivity or a posting of a Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity, at a minimum, must be through the Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility.

Section 3.8 of the LGIP shall not apply to a failure to satisfy the requirements of this Section 3.2 of this Appendix 2 to the LGIP.

**3.3 Communication of Transition Cluster Interconnection Study Deposit Amount.**

The CAISO shall provide each Interconnection Customer with the amount of its Transition Cluster Interconnection Study Deposit within five (5) Business Days after the effective date of this Appendix 2 to the LGIP.

**3.4 Use of the Transition Cluster Interconnection Study Deposit.**

The CAISO shall deposit all Transition Cluster Interconnection Study Deposits in an interest bearing account at a bank or financial institution designated by the CAISO. The Transition Cluster Interconnection Study Deposit shall be applied to pay for prudent costs incurred by the CAISO, the Participating TOs, or third parties at the direction of the CAISO or Participating TOs, as applicable, to perform and administer the Interconnection Studies. The Transition Cluster Interconnection Study Deposit is not refundable.

Upon execution of an LGIA by an Interconnection Customer, the CAISO and the applicable Participating TO(s), or the approval by FERC of an unexecuted LGIA, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Transition Cluster Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceed the costs the CAISO, Participating TOs, or third parties have incurred on the Interconnection Customer's behalf.

Notwithstanding the foregoing, an Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request during an Interconnection Study Cycle shall be obligated to pay to the CAISO all costs in excess of the Transition Cluster Interconnection Study Deposit that have been prudently incurred or irrevocably have been committed to be incurred with respect to that Interconnection Request prior to withdrawal. The CAISO will reimburse the applicable Participating TO(s) or third parties, as applicable, for all work performed associated with the Interconnection Request at the CAISO's direction. The Interconnection Customer must pay all monies due before it is allowed to obtain any Interconnection Study data or results.

All non-refundable portions of the Transition Cluster Interconnection Study Deposit that exceed the costs the CAISO, Participating TOs, or third parties have incurred on the Interconnection Customer's behalf shall be treated in accordance with CAISO Tariff Section 37.9.4.

**3.5 Obligation for Study Costs.**

The CAISO shall charge and the Interconnection Customer shall pay the actual costs of the Interconnection Studies. The CAISO shall issue invoices for Interconnection Studies that shall include a detailed and itemized accounting of the cost of each Interconnection Study. The CAISO shall draw from the Transition Cluster Interconnection Study Deposit any undisputed costs within thirty (30) calendar days after issuance of an invoice therefor. Whenever the actual cost of performing the Interconnection Studies exceeds the Transition Cluster Interconnection Study Deposit, the Interconnection Customer shall pay the undisputed difference in accordance with the CAISO issued invoice within thirty (30) calendar days. The CAISO shall not be obligated to continue to have any studies conducted unless the Interconnection Customer has paid all undisputed amounts in compliance herewith. In the event an Interconnection Study is performed by the CAISO, the Interconnection Customer shall pay only the costs of those activities performed by the Participating TO to adequately review or validate that Interconnection Study.

**4. Phase I Interconnection Study.**

**4.1 Grouping Interconnection Requests and Base Cases.**

Interconnection Requests in the Transition Cluster shall be grouped in accordance with LGIP Section 6.1. Rather than Generation submitted during a Queue Cluster Window, the Interconnection Base Case Data for the Transition Cluster shall reflect the Generation from those Interconnection Requests that satisfy the requirements of Sections 3.1 and 3.2 of this Appendix 2 to the LGIP.

**4.2 Schedule.**

The Phase I Interconnection Study, as described in LGIP Section 6, including the grouping and Interconnection Base Case Data development, for the Transition Cluster shall commence no later than December 1, 2008 or sixty (60) calendar days after the effective date of this Appendix 2 to the LGIP, whichever is later. Results of the Phase I Interconnection Study shall be provided to the Interconnection Customer within two hundred forty (240) calendar days after commencement under this Section.

**4.3 Results Meeting.**

Within sixty (60) calendar days after providing the Phase I Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s), the CAISO and the Interconnection Customer shall meet to discuss the results of the Phase I Interconnection Study, including assigned cost responsibility.

**5. Phase II Interconnection Study.**

**5.1 Phase II Interconnection Study Procedures.**

The Phase II Interconnection Study, as described in LGIP Section 7, for the Transition Cluster shall commence no later than one hundred twenty (120) calendar days after publication of the Phase I Interconnection Study report. Results of the Phase II Interconnection Study shall be provided to the Interconnection Customer within three hundred thirty (330) calendar days after commencement under this Section.

**5.2 Coordination of the Phase II Interconnection Study with the Transmission Planning Process.**

As part of the Uniform Planning Assumptions and Study Plan developed under Section 24 of the CAISO Tariff during calendar year 2009, the CAISO shall include technical analyses intended to identify, at a minimum, conceptual transmission upgrades that may access proposed Large Generating Facilities included in the Transition Cluster that are located in Energy Resource Areas.

**6. Interconnection Financial Security.**

The provisions of LGIP Section 9 shall apply to the Transition Cluster, except that the initial posting of Interconnection Financial Security under LGIP Section 9.2 in Appendix Y shall be required on or before one hundred twenty (120) calendar days after publication of the Phase I Interconnection Study report.

**Appendix 3 to LGIP**

**LARGE GENERATOR INTERCONNECTION STUDY PROCESS AGREEMENT**

**THIS AGREEMENT** is made and entered into this \_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_, ("Interconnection Customer") and the California Independent System Operator Corporation, a California nonprofit public benefit corporation existing under the laws of the State of California, ("CAISO"). The Interconnection Customer and the CAISO each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

**WHEREAS**, the Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_; and

**WHEREAS**, the Interconnection Customer desires to interconnect the Large Generating Facility with the CAISO Controlled Grid; and

**WHEREAS**, the Interconnection Customer has requested the CAISO to conduct or cause to be performed Interconnection Studies to assess the system impact of interconnecting the Large Generating Facility to the CAISO Controlled Grid and to specify and estimate the cost of the equipment, engineering, procurement and construction work needed on the Participating TO's electric system in accordance with Good Utility Practice to physically and electrically connect the Large Generating Facility to the CAISO Controlled Grid;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the CAISO's FERC-approved Large Generation Interconnection Procedures in CAISO Tariff Appendix Y ("LGIP") or the Master Definitions Supplement, Appendix A to the CAISO Tariff, as applicable.
- 2.0 The Interconnection Customer elects and the CAISO shall conduct or cause to be performed Interconnection Studies, including any accelerated Interconnection Study, consistent with the LGIP in accordance with the CAISO Tariff.
- 3.0 The scope of the Interconnection Studies shall be subject to the assumptions set forth in Appendices A and B to this Agreement.

- 4.0 The Interconnection Studies will be based upon the technical information provided by the Interconnection Customer in the Interconnection Request, as may be modified as the result of the Scoping Meeting, subject to any modifications in accordance with Section 6.7.2 of the LGIP and modifications to the proposed Commercial Operation Date of the Large Generating Facility permitted by the LGIP. The CAISO reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Studies. If the Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the Interconnection Studies may be modified as specified in the LGIP.
- 5.0 The Interconnection Study report for each Interconnection Study shall provide the information specified in the LGIP.
- 6.0 The Interconnection Customer shall provide an Interconnection Study Deposit, a Site Exclusivity Deposit, if applicable, and other Interconnection Financial Security for the performance of the Interconnection Studies in accordance with the provisions of Sections 3.5.1 and 9 of the LGIP.

Following the issuance of an Interconnection Study report, the CAISO shall charge and the Interconnection Customer shall pay its share of the actual costs of the Interconnection Study pursuant to Sections 3.5.1 and 7.8 of the LGIP.

Any difference between the deposits made toward the Interconnection Study process and associated administrative costs, including any accelerated studies, and the actual cost of the Interconnection Studies and associated administrative costs shall be paid by or refunded to the Interconnection Customer, in the appropriate allocation, in accordance with Section 3.5.1 of the LGIP.

- 7.0 Pursuant to Section 3.7 of the LGIP, the CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems. The CAISO may provide a copy of the Phase I Interconnection Study results to an Affected System Operator and the Western Electricity Coordinating Council. Requests for review and input from Affected System Operators or the Western Electricity Coordinating Council may arrive at any time prior to interconnection.
- 8.0 Substantial portions of technical data and assumptions used to perform the Phase I Interconnection Study, such as system conditions, existing and planned generation, and unit modeling, may change after the CAISO provides the Interconnection Study results to the Interconnection Customer. Interconnection Study results will reflect available data at the time the CAISO provides the Phase I Interconnection Study report to the Interconnection Customer. The CAISO shall not be responsible for any additional costs, including, without limitation, costs of new or additional facilities, system upgrades, or schedule changes, that may be incurred by the Interconnection Customer as a result of changes in such data and assumptions.

- 9.0 **[NOT USED]**
- 10.0 The CAISO shall maintain records and accounts of all costs incurred in performing the Interconnection Study in sufficient detail to allow verification of all costs incurred, including associated overheads. The Interconnection Customer shall have the right, upon reasonable notice, within a reasonable time at the CAISO's offices and at its own expense, to audit the CAISO's records as necessary and as appropriate in order to verify costs incurred by the CAISO. Any audit requested by the Interconnection Customer shall be completed, and written notice of any audit dispute provided to the CAISO representative, within one hundred eighty (180) calendar days following receipt by the Interconnection Customer of the CAISO's notification of the final costs of the Interconnection Study.
- 11.0 In accordance with Section 3.8 of the LGIP, the Interconnection Customer may withdraw its Interconnection Request at any time by written notice to the CAISO. Upon receipt of such notice, this Agreement shall terminate, subject to the requirements of Section 3.5.1 and 13.1 of the LGIP.
- 12.0 Pursuant to Section 4 of the LGIP, this Agreement shall become effective upon the date the fully executed Agreement is received by the CAISO. If the CAISO does not receive the fully executed Agreement and deposit or other Interconnection Financial Security pursuant to Section 3.5.1 of the LGIP, then the Interconnection Request will be deemed withdrawn upon the Interconnection Customer's receipt of written notice by the CAISO pursuant to Section 3.8 of the LGIP.
- 13.0 Miscellaneous.
- 13.1 Dispute Resolution. Any dispute, or assertion of a claim, arising out of or in connection with this Agreement, shall be resolved in accordance with Section 13.5 of the LGIP.
- 13.2 Confidentiality. Confidential Information shall be treated in accordance with Section 13.1 of the LGIP.
- 13.3 Binding Effect. This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 13.4 Conflicts. In the event of a conflict between the body of this Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.

- 13.5 Rules of Interpretation. This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article or Section of this Agreement or such Appendix to this Agreement, or such Section of the LGIP or such Appendix to the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article, Section, or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".
- 13.6 Entire Agreement. This Agreement, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.
- 13.7 No Third Party Beneficiaries. This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.
- 13.8 Waiver. The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO or CAISO. Any waiver of this Agreement shall, if requested, be provided in writing.

Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.

- 13.9 Headings. The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.
- 13.10 Multiple Counterparts. This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 13.11 Amendment. The Parties may by mutual agreement amend this Agreement by a written instrument duly executed by both of the Parties.
- 13.12 Modification by the Parties. The Parties may by mutual agreement amend the Appendices to this Agreement by a written instrument duly executed by both of the Parties. Such amendment shall become effective and a part of this Agreement upon satisfaction of all applicable laws and regulations.
- 13.13 Reservation of Rights. The CAISO shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 13.14 No Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.



13.15 Assignment. This Agreement may be assigned by a Party only with the written consent of the other Party; provided that a Party may assign this Agreement without the consent of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; and provided further that the Interconnection Customer shall have the right to assign this Agreement, without the consent of the other Party, for collateral security purposes to aid in providing financing for the Large Generating Facility, provided that the Interconnection Customer will require any secured party, trustee or mortgagee to notify the other Party of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Section will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the other Party of the date and particulars of any such exercise of assignment right(s). Any attempted assignment that violates this Section is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

**IN WITNESS THEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

**California Independent System Operator Corporation**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[Insert name of the Interconnection Customer]**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Appendix A**

**Large Generator Interconnection  
Study Process Agreement**

**ASSUMPTIONS USED IN CONDUCTING THE  
PHASE I INTERCONNECTION STUDY**

The Phase I Interconnection Study will be based upon the information set forth in the Interconnection Request and agreed upon in the Scoping Meeting held on \_\_\_\_\_, subject to any modifications in accordance with Section 6.7.2 of the LGIP, and the following assumptions:

Designation of Point of Interconnection and configuration to be studied.

Deliverability status requested (full capacity or Energy only)

**Appendix B**

**Large Generator Interconnection  
Study Process Agreement**

**DATA FORM TO BE PROVIDED BY THE INTERCONNECTION CUSTOMER  
PRIOR TO COMMENCEMENT OF THE PHASE II INTERCONNECTION STUDY**

Generating Facility size (MW): \_\_\_\_\_

Provide two copies of this completed form and other required plans and diagrams in accordance with Section 7.1 of the LGIP.

Provide location plan and one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.

One set of metering is required for each generation connection to the new bus or existing CAISO Controlled Grid station. Number of generation connections: \_\_\_\_\_

On the one line indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)

On the one line indicate the location of auxiliary power. (Minimum load on CT/PT)

Will an alternate source of auxiliary power be available during CT/PT maintenance?  
Yes \_\_\_\_\_ No \_\_\_\_\_

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? \_\_\_\_\_Yes \_\_\_\_\_No  
(Please indicate on one line).

What type of control system or PLC will be located at the Interconnection Customer's Large Generating Facility?

\_\_\_\_\_  
\_\_\_\_\_

What protocol does the control system or PLC use?

\_\_\_\_\_  
\_\_\_\_\_

Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.



**Appendix 4 to LGIP**

**AGREEMENT FOR THE ALLOCATION OF RESPONSIBILITIES WITH REGARD TO  
LARGE GENERATOR INTERCONNECTION PROCEDURES AND INTERCONNECTION STUDY  
AGREEMENTS**

This Agreement for the Allocation of Responsibilities With Regard to Large Generator Interconnection Procedures and Interconnection Study Agreements ("Agreement"), dated \_\_\_\_\_, is entered into between the California Independent System Operator Corporation ("CAISO") and **[NAME OF PTO]** \_\_\_\_\_ ("PTO"). The CAISO and PTO are jointly referred to as the "Parties" and individually, as a "Party."

WHEREAS, this Agreement will ensure an independent assessment of new Large Generating Facility impacts on the CAISO Controlled Grid and take advantage of the respective expertise of the Parties to facilitate efficient and cost effective Interconnection Study procedures in a manner consistent with the Federal Energy Regulatory Commission's ("FERC") July 1, 2005 Order (112 FERC ¶ 61,009), FERC's August 26, 2005 Order (112 FERC ¶ 61,231), and prior FERC Orders recognizing that Order No. 2003 did not allocate responsibilities between transmission owners and transmission providers for the provision of Interconnection Service and suggesting those parties enter into an agreement to allocate those responsibilities. Southwest Power Pool, Inc., 106 FERC ¶ 61,254 (2004).

NOW THEREFORE, in view of the respective responsibilities assigned to the Parties and the foregoing FERC orders, and the provisions of the CAISO's Large Generator Interconnection Procedures set forth in CAISO Tariff Appendix Y ("LGIP"), the CAISO and PTO agree to the following allocation of responsibilities for a centralized Interconnection Study process under the direction and oversight of the CAISO:

**1. DEFINITIONS.**

Unless otherwise defined herein, all capitalized terms shall have the meaning set forth in the CAISO Tariff.

**2. TERM OF AGREEMENT.**

This Agreement shall become effective upon the date specified in the first paragraph above and shall remain in effect until (1) terminated by all Parties in writing, or (2) with respect to the PTO, upon the termination of that entity's status as a PTO pursuant to the Transmission Control Agreement, as amended from time to time.

**3. PROVISIONS FOR ALLOCATION OF RESPONSIBILITIES BETWEEN CAISO AND PTO.**

**3.1 Interconnection Service:** The Parties acknowledge that, as the transmission provider, the CAISO is responsible for reliably operating the transmission grid. The Parties also recognize that while the CAISO is a transmission provider under the CAISO Tariff, the CAISO does not own any transmission facilities, and the PTO owns, constructs, and maintains the facilities to which Large Generating Facilities are to be interconnected, and that the PTO may construct or modify facilities to allow the interconnection. While the Parties recognize that the CAISO will be responsible for conducting or causing to be performed Interconnection Studies and similar studies, the PTO will participate in these studies and conduct certain portions of studies, under the direction and oversight of, and approval by, the CAISO, as provided in this Agreement. The CAISO shall not enter into any Interconnection Study agreement with an Interconnection Customer that is contrary to these rights.

**3.2 [INTENTIONALLY LEFT BLANK]**

**3.3 Transmission Owners' Right to Participation in Studies, Committees and Meetings:**

**3.3.1** In the event that an Interconnection Customer proposes to interconnect a Large Generating Facility with the PTO's facilities, or the PTO is an owner of an affected system, the PTO shall have the right to participate in any Interconnection Study or any other study conducted in connection with such request for Interconnection Service. "Participate" in this Section 3.3.1 means physically perform any study or portion thereof in connection with an Interconnection Request, under the direction and oversight of, and approval by, the CAISO pursuant to Section 3.4 of this Agreement; provide or receive input, data or other information regarding any study or portion thereof consistent with Section 3.4 of this Agreement; and, when any study or portion thereof in connection with an Interconnection Request is physically performed by an entity other than the PTO, perform activities necessary to adequately review or validate, as appropriate, any results of the study or portions thereof and provide recommendations.

**3.3.2** In the event that an Interconnection Customer proposes to interconnect a Large Generating Facility with the PTO's facilities, or the PTO is an owner of an affected system, the PTO shall have the right to participate in all meetings expressly established pursuant to the CAISO LGIP. As appropriate, the PTO may participate in all other material or substantive communications in connection with an Interconnection Request.

**3.4 Interconnection Study Responsibility Allocation:** In complying with its responsibility for conducting or causing to be performed Interconnection Studies, the CAISO will assign responsibility for performance of portions of the Interconnection Studies to the PTO, under the direction and oversight of, and approval by, the CAISO, as set forth in Attachment A, except as specifically qualified as follows:

**3.4.1** For any tasks specifically assigned to the PTO pursuant to Attachment A or otherwise mutually agreed upon by the CAISO and the PTO, the CAISO reserves the right, on a case-by-case basis, to perform or reassign to a mutually agreed upon and pre-qualified contractor such task only where: (a) the quality and accuracy of prior PTO Interconnection Study work product resulting from assigned tasks has been deemed deficient by the CAISO, the CAISO has notified the PTO pursuant to the notice provision of Section 4.16 of this Agreement in writing of the deficiency, and the deficiency has not been cured pursuant to Section 3.4.2 of this Agreement; (b) the timeliness of PTO Interconnection Study work product has been deemed deficient, and either (i) the CAISO has not been notified of the reasons and actions taken to address the timeliness of the work, or (ii) if notified, the stated reasons and actions taken are insufficient or unjustifiable and the PTO has not cured the deficiency pursuant to Section 3.4.2 of this Agreement; (c) the PTO has failed, in a mutually agreed upon timeframe, to provide the CAISO with information or data related to an Interconnection Request despite a written request by the CAISO, pursuant to Section 3.5 hereof, to do so, and such data is the responsibility of the PTO to provide to the CAISO, subject to Section 4.3 of this Agreement; (d) the PTO

advises the CAISO in writing that it does not have the resources to adequately or timely perform the task according to the applicable timelines set forth in Attachment A; or (e) the estimated cost of the PTO performing the task has been determined in writing by the CAISO to significantly exceed the cost of the CAISO or mutually agreed upon contractor performing the task, inclusive of the costs that will be incurred by the PTO in exercising its review rights of the results of any such tasks performed by such third party(ies). If the CAISO deviates from the assignments set forth in Attachment A based on the foregoing factors, the CAISO will provide the PTO with a written explanation for the deviation and any associated reassignments of work. The PTO may contest the deviation pursuant to the Dispute Resolution procedures set forth in Section 4.1 of this Agreement.

Task(s) may only be reassigned in accordance with this Section 3.4.1 where the PTO has been deemed to be deficient in relation to that (those) particular task(s).

**3.4.2 Cure for reassigned Interconnection Study work**

The CAISO shall not reassign task(s) without the opportunity to cure, as specified in Section 3.4.1 of this Agreement. The following actions will serve to cure the deficiencies and result in restoring the assignment(s) as provided in Attachment A:

- (a) The CAISO and PTO shall negotiate in good faith and agree to a corrective action plan proposed by the PTO, including a reasonably adequate cure period, and the corrective action plan is satisfactorily implemented.
- (b) The CAISO determines the deficiency is cured without an action plan.

**3.4.3** Assessment of prior PTO Interconnection Study work shall only be based on work conducted under the process that becomes effective concurrent with the effective date of this Agreement. Further, assessment of prior PTO Interconnection Study work shall be based on work conducted no earlier than the eighteen (18) month period prior to the date of the CAISO notice of deviation from assignments set forth in Attachment A to this Agreement.

**3.5 Information Exchange:** The PTO shall provide the CAISO, subject to confidentiality requirements in Section 4.3 of this Agreement, with any documentation or data requested by the CAISO reasonably necessary to permit the CAISO to perform, review, validate and approve any Interconnection Study, or portion thereof, performed by the PTO. The CAISO shall provide the PTO with any documentation or data requested by the PTO, subject to confidentiality requirements in Section 4.3 of this Agreement, reasonably necessary to perform, review, and validate any Interconnection Study, or portion thereof.

**3.6 Consistency with Provisions for Centralized Interconnection Study Process:** The CAISO and PTO have determined that the processes and allocation of responsibilities in Section 3.4 of this Agreement ensure that impacts to the CAISO Controlled Grid are independently assessed and that the assignment of responsibilities minimizes handoffs, takes advantage of non-transferable skills, and promotes the efficiency and cost-effectiveness of the centralized Interconnection Study processes, consistent with LGIP Section 3.2.

- 3.7 Re-Studies:** If any re-studies are required, the CAISO will confer with the PTO as to the need for a re-study. The CAISO will make the final determination regarding the need for a re-study, subject to dispute resolution procedures.
- 3.8 Use of Contractors:** Nothing in this Agreement shall prevent either the CAISO or the PTO from using qualified, mutually agreed upon third party contractors to meet that Party's rights or obligations under this Agreement or the LGIP. To promote the efficiency of the process, the CAISO and PTO will collaborate to identify a list of the mutually agreed to qualified contractors available to the Parties.
- 3.9 Performance Standards:** Each Party shall perform all of its obligations under the LGIP, this Agreement, and any FERC approved Interconnection Study procedures that may be adopted by the CAISO to implement the LGIP or this Agreement in accordance with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice.
- 3.10 Recovery of Costs:** In accordance with Section 3.5.1 of the LGIP, the PTO shall recover all actual costs from the CAISO incurred in performing Interconnection Studies or portions thereof assigned to it by the CAISO, including all costs incurred in exercising its right to review, and make recommendations on, Interconnection Studies or portions thereof performed by the CAISO and/or contractors under Section 3.8 of this Agreement.

#### 4 GENERAL TERMS AND CONDITIONS.

- 4.1 Dispute Resolution:** In the event any dispute regarding the terms, conditions, and performance of this Agreement is not settled informally, the Parties shall follow the CAISO ADR Procedures set forth in Section 13 of the CAISO Tariff.
- 4.2 Liability:** No Party to this Agreement shall be liable to any other Party for any direct, indirect, special, incidental or consequential losses, damages, claims, liabilities, costs or expenses (including attorneys fees and court costs) arising from the performance or non-performance of its obligations under this Agreement regardless of the cause (including intentional action, willful action, gross or ordinary negligence, or force majeure); provided, however, that a Party may seek equitable or other non-monetary relief as may be necessary to enforce this Agreement and that damages for which a Party may be liable to another Party under another agreement will not be considered damages under this Agreement.
- 4.3 Confidentiality:** Confidential Information shall be treated in accordance with Section 13.1 of the LGIP.
- 4.4 Binding Effect:** This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 4.5 Conflicts:** In the event of a conflict between the body of this Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.



- 4.6 Rules of Interpretation:** This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section, Attachment, or Appendix means such Article or Section of this Agreement or such Attachment or Appendix to this Agreement, or such Section of the LGIP or such Appendix to the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article or Section; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".
- 4.7 Entire Agreement:** This Agreement, including all Attachments hereto, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, among the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants, which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.
- 4.8 No Third Party Beneficiaries:** This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.
- 4.9 Waiver:** The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party. Any waiver at any time by a Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Any waiver of this Agreement shall, if requested, be provided in writing. Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.

- 4.10 Headings:** The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.
- 4.11 Multiple Counterparts:** This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 4.12 Modification by the Parties:** The Parties may amend this Agreement and any Appendices to this Agreement only (1) by mutual agreement of the Parties by a written instrument duly executed by the Parties, subject to FERC approval or (2) upon the issuance of a FERC order, pursuant to Section 206 of the Federal Power Act. It is the Parties' intent that FERC's right to change any provision of this Agreement shall be limited to the maximum extent permissible by law and that any such change, if permissible, shall be in accordance with the Mobile-Sierra public interest standard applicable to fixed rate agreements. *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956). Such amendment shall become effective and a part of this Agreement upon satisfaction of all applicable laws and regulations. Notwithstanding the foregoing, Attachment B (Notices) may be modified as set forth in Section 4.15 of this Agreement, and the CAISO and the PTO may from time to time mutually agree to deviate from Attachment A in accordance with the provisions of this Agreement, however, such deviation shall be subject to Section 4.9 of this Agreement and not considered a course of dealing.
- 4.13 No Partnership:** This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.
- 4.14 Assignment:** This Agreement may be assigned by a Party only with the written consent of the other Parties; provided that a Party may assign this Agreement without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.
- 4.15 Notices:** Any notice, demand, or request provided in this Agreement, or served, given, or made in connection with it, will be in writing and deemed properly served, given, or made if delivered in person, transmitted by facsimile, or sent by United States mail, postage prepaid, to the persons specified in Attachment B hereto unless otherwise provided in this Agreement. Any Party may at any time, by notice to all other Parties, change the designation or address of the person specified in Attachment B as the person who receives notices pursuant to this Agreement.

**IN WITNESS WHEREOF**, the Parties have executed this Agreement in multiple originals, each of which shall constitute and be an original effective agreement among the Parties.

**California Independent System Operator Corporation**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[NAME OF PTO]**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**ATTACHMENT A**

**INTERCONNECTION STUDY RESPONSIBILITY ALLOCATION**

Description of Large Generator Interconnection Process: Roles and Responsibilities of CAISO and PTOs.

**Purpose:** This Attachment A to the “AGREEMENT FOR THE ALLOCATION OF RESPONSIBILITIES WITH REGARD TO LARGE GENERATOR INTERCONNECTION PROCEDURES AND INTERCONNECTION STUDY AGREEMENTS” serves as further clarification of the roles and responsibilities of the parties to this Agreement. The CAISO will assign responsibility for performance of portions of the Interconnection Studies to the relevant PTOs, under the direction and oversight of, and approval by, the CAISO, as set forth in this Attachment A. This document serves as a general overview of only the roles and responsibilities as between the CAISO and PTOs. This Agreement does not include the process steps, involvement or obligations of the Interconnection Customer (IC). This Agreement is not inclusive of all procedures necessary to comply with all provisions of the LGIA, LGIP and Large Generator Interconnection Study Process Agreement.

**Interconnection Request (IR) Process**

1. CAISO forwards the IR to the PTO within three (3) Business Days (BD) of receipt of IR from Interconnection Customer (IC)
2. PTO(s) provides any feed back regarding IR to CAISO within 3 BD
3. CAISO distributes draft Scoping Meeting minutes for review within 5 BD of Scoping Meeting.
4. PTO(s) provide any comments to the Scoping Meeting minutes within 2 BD of receipt of draft Scoping Meeting minutes.
5. CAISO issues the final Scoping Meeting minutes within 3 BD of receipt of comments.

**Phase I Interconnection Study Timeline**

| Line  | Initial (Phase I) Cluster Study   | Typical Calendar Days | Timeline (Days) |
|---|---|-----------------------|-----------------|
| 1   | CAISO and PTOs develop initial Generating Facility groups for initial Dispatch assumptions and cost allocation purposes (except for thermal overload mitigation).   | 7                     | 1-7             |
| 2   | PTOs develop draft Base Cases, each representing all Generating Facilities in the queue cluster, and deliver to CAISO.  | 21                    | 1-21            |
| 3   | PTO develops preferred and alternative, if applicable, direct interconnection plans, including the need for an Interconnection Grid Substation (IGS).   | 25                    | 22-46           |
| 4   | PTO develops draft contingency lists.   | 25                    | 22-46           |
| 5   | CAISO reviews and approves Base Cases and direct interconnection plans and merges them together, as needed.<br>CAISO updates summer peak Base Cases to reflect withdrawn projects from previous queue cluster study. PTOs update off-peak Base Cases.<br>CAISO reviews and approves contingency lists. PTO needs time to consider CAISO proposed changes. | 21                    | 47-67           |
| 6   | CAISO provides Deliverability Assessment results identifying constrained facilities, using summer peak Base Cases, and prepares results summary and may propose mitigation plans for PTO review.  | 21                    | 68-88           |
| 7   | At the CAISO's direction, the PTO performs the off-peak Load Flow, and summer peak and off-peak Post Transient and Stability analyses and identifies mitigation solutions, as appropriate, and submits draft study results to CAISO for review and direction.   | 21                    | 68-88           |
| 8   | PTO develops mitigation plans for summer peak and off-peak or supplements CAISO proposed mitigation plans for consideration, as appropriate, and submits to CAISO for review and direction  | 21                    | 89-109          |
| 9   | CAISO retests Deliverability Assessment results with proposed Delivery Network Upgrades and withdrawn projects from previous cluster study removed. PTO reviews and comments on retest results.   | 14                    | 110-123         |
| 10  | CAISO develops shift factors for cost allocation purposes of all Network Upgrades associated with mitigating thermal overloads.   | 7                     | 124-130         |
| <b>Short Circuit Duty (concurrent with the LF/PT/S)</b> |   |                       |                 |
| 11  | CAISO coordinates with other potentially affected facility owners. <sup>1</sup>   | n/a                   | n/a             |

<sup>1</sup> In accordance with the WECC Short Circuit Duty Procedure

|  |   |    |         |
|--|---|----|---------|
| 12   | CAISO directs PTO to develop Base Case and run short circuit analysis.  | 21 | 46-66   |
| 13   | PTO performs facilities review. (Note: possibly for feedback into the power flow studies and PTO mitigation plans.)   | 28 | 67-94   |
| 14   | PTO prepares draft study results and submits to the CAISO for review and direction.   | 28 | 95-123  |
| <b>Facility cost estimates and schedules</b> |   |    |         |
| 15   | At the CAISO's direction, PTO(s) prepares cost estimates and schedules for the direct assignment facilities and Network Upgrades identified in the power flow, short circuit duty, post transient, and stability studies.   | 20 | 124-143 |
| <b>Final Report</b>                          |   |    |         |
| 16   | At the CAISO's direction, PTO(s) prepares draft report for impacts in its service territory.  | 7  | 144-150 |
| 17   | CAISO compiles all results into a draft report that covers grid impacts, as appropriate. CAISO reviews integrated draft report and submits comments, recommendations and direction to the PTO.  | 9  | 151-159 |
| 18   | PTO incorporates CAISO's directions, conclusions and recommendations. If CAISO conclusions and recommendations conflict with PTO conclusions, then CAISO and PTO must coordinate to resolve conflicts. Any remaining conflicts must be noted in the final report. | 14 | 160-173 |
| 19   | PTO submits final draft report to the CAISO. The CAISO will finalize the report and tender the CAISO approved report to the ICs.  |    |         |
| <b>Final Study Report</b>                    |   |    |         |
| 20   | CAISO provides final approved report to ICs, PTO, and any applicable Affected Systems.  | 7  | 174-180 |

**Phase II Interconnection Study Process\*\***

\*\*All Interconnection Studies will be under the direction and oversight of, and approval by, the CAISO and may involve more than one PTO.

| Line | Standard Project Refinement and Facilities Study   | Typical Calendar Days | Timeline (Days) |
|------|--|-----------------------|-----------------|
| 21   | PTOs update Base Cases from Phase I Interconnection Study line 5 to remove projects that have withdrawn.   | 30                    | 1-30            |
| 22   | CAISO reviews and approves Base Cases.   |                       |                 |
| 23   | CAISO and PTOs update studies performed in Phase I lines 6-14 using Base Cases from line 22. Additional alternatives may be considered that address future generation development potential, meet load serving capability, and economic benefit objectives, and phased development and option value of transmission projects to address uncertainty. | 120                   | 31-150          |

|                                     |  |    |          |
|-------------------------------------|--|----|----------|
| 23.1                                | Projects from line 23 requiring CPUC or CAISO Governing Board approval may need to go through the Transmission Planning Process stakeholder process. After completing the stakeholder review process, these projects would proceed through the activities described in lines 24 through 32. Projects not requiring CPUC or CAISO Governing Board approval, or that have already gone through a stakeholder process, would proceed immediately to the activities described in lines 24 through 32. (See Appendix C of the CAISO's proposal for the generator interconnection process reform.) |    |          |
| 24                                  | PTOs develop draft off-peak and summer peak operating year Base Cases as appropriate where each case includes all Generating Facilities in Phase II Interconnection Study having the same operating date and deliver to CAISO.   | 30 | 151-180* |
| 25                                  | CAISO reviews and approves cases from line 24.   |    |          |
| 26                                  | At the CAISO's direction, the PTOs perform operational studies using cases from line 25 to determine Network Upgrade requirements for each study year and identify any special operational requirements to connect projects in the year of study.  | 45 | 181-225* |
| 27                                  | At the CAISO's direction, the PTOs perform additional operational studies to identify the optimal approach for building out the overall plan of service on a segmented (i.e. building block) basis acknowledging that portions of the overall plan of service may be staged in segments over time.   | 30 | 226-255* |
| <b>Final Plan of Service Report</b> |  |    |          |
| 28                                  | At the CAISO's direction, PTO(s) prepares draft plan of service report.  | 7  | 256-262* |
| 29                                  | CAISO reviews draft plan of service report and submits comments, recommendations and direction to the PTO.   | 9  | 263-271* |
| 30                                  | PTO incorporates CAISO directions, conclusions and recommendations. If CAISO conclusions and recommendations conflict with PTO conclusions, then CAISO and PTO must coordinate to resolve conflicts. Any remaining conflicts must be noted in the final report.  | 14 | 272-285* |
| 31                                  | PTO submits final draft report to the CAISO. The CAISO will finalize the report.   |    |          |
| <b>Facility Costs and Schedules</b> |  |    |          |
| 32                                  | At the CAISO's direction, PTO(s) prepares detailed cost estimates and schedules for the direct assignment facilities and Network Upgrades identified in the overall plan of service and including individual segments.   | 75 | 256-330* |

\* For projects going through the Transmission Planning Process as described in Line 23.1, the activities in lines 24 through 32 may be delayed until the Network Upgrade plan is approved through the Transmission Planning Process. However, the subsequent cluster study would proceed on schedule based on the plan of service from line 23.

**ATTACHMENT B**  
**CONTACTS FOR NOTICES**

**[Section 4.15]**

**California ISO**

Manager, Transmission Engineering  
151 Blue Ravine Road  
Folsom, CA 95630  
Phone: 916.351.2104  
Fax: 916.351.2264

**[NAME OF PTO]**

[Address of PTO]



**Attachment B3 – Clean Sheets**  
**Generation Interconnection Process Reform Amendment Filing**

**4<sup>th</sup> Replacement MRTU Tariff**

**CAISO TARIFF APPENDIX Z**

**Large Generator Interconnection Agreement  
for Interconnection Requests in a Queue Cluster Window**

**LARGE GENERATOR INTERCONNECTION AGREEMENT (LGIA)**  
**[INTERCONNECTION CUSTOMER]**  
**[PARTICIPATING TO]**  
**CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

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**LARGE GENERATOR INTERCONNECTION AGREEMENT**

**[INTERCONNECTION CUSTOMER]**

**[PARTICIPATING TO]**

**CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

**THIS LARGE GENERATOR INTERCONNECTION AGREEMENT** ("LGIA") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and among \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ ("Interconnection Customer" with a Large Generating Facility), \_\_\_\_\_, a corporation organized and existing under the laws of the State of California ("**Participating TO**"), and **California Independent System Operator Corporation**, a California nonprofit public benefit corporation organized and existing under the laws of the State of California ("CAISO"). Interconnection Customer, Participating TO, and CAISO each may be referred to as a "Party" or collectively as the "Parties."

**RECITALS**

**WHEREAS**, CAISO exercises Operational Control over the CAISO Controlled Grid; and

**WHEREAS**, the Participating TO owns, operates, and maintains the Participating TO's Transmission System; and

**WHEREAS**, Interconnection Customer intends to own, lease and/or control and operate the Generating Facility identified as a Large Generating Facility in Appendix C to this LGIA; and

**WHEREAS**, Interconnection Customer, Participating TO, and CAISO have agreed to enter into this LGIA for the purpose of interconnecting the Large Generating Facility with the Participating TO's Transmission System;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein, it is agreed:

When used in this LGIA, terms with initial capitalization that are not defined in Article 1 shall have the meanings specified in the Article in which they are used.

**ARTICLE 1. DEFINITIONS**

**Adverse System Impact** shall mean the negative effects due to technical or operational limits on conductors or equipment being exceeded that may compromise the safety and reliability of the electric system.

**Affected System** shall mean an electric system other than the CAISO Controlled Grid that may be affected by the proposed interconnection, including the Participating TO's electric system that is not part of the CAISO Controlled Grid.

**Affiliate** shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Council** shall mean the Western Electricity Coordinating Council or its successor.

**Applicable Reliability Standards** shall mean the requirements and guidelines of NERC, the Applicable Reliability Council, and the Balancing Authority Area of the Participating TO's Transmission System to which the Generating Facility is directly interconnected.

**Balancing Authority** shall mean the responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.

**Balancing Authority Area** shall mean the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.

**Base Case** shall mean the base case power flow, short circuit, and stability data bases used for the Interconnection Studies.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of this LGIA.

**Breaching Party** shall mean a Party that is in Breach of this LGIA.

**Business Day** shall mean Monday through Friday, excluding federal holidays and the day after Thanksgiving Day.

**CAISO Controlled Grid** shall mean the system of transmission lines and associated facilities of the parties to the Transmission Control Agreement that have been placed under the CAISO's Operational Control.

**CAISO Tariff** shall mean the CAISO's tariff, as filed with FERC, and as amended or supplemented from time to time, or any successor tariff.

**Calendar Day** shall mean any day including Saturday, Sunday or a federal holiday.

**Commercial Operation** shall mean the status of an Electric Generating Unit or project phase at a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

**Commercial Operation Date** of an Electric Generating Unit or project phase shall mean the date on which the Electric Generating Unit or project phase at the Generating Facility commences Commercial Operation as agreed to by the applicable Participating TO, the CAISO, and the Interconnection Customer pursuant to Appendix E to this LGIA, and in accordance with the implementation plan agreed to by the Participating TO and the CAISO for multiple individual Electric Generating Units or project phases at a Generating Facility where an Interconnection Customer intends to establish separate Commercial Operation Dates for those Electric Generating Units or project phases.

**Confidential Information** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, subject to Article 22.1.2.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of this LGIA.

**Distribution System** shall mean those non-CAISO-controlled transmission and distribution facilities owned by the Participating TO.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to the Participating TO's Distribution System. Distribution Upgrades do not include Interconnection Facilities.

**Effective Date** shall mean the date on which this LGIA becomes effective upon execution by all Parties subject to acceptance by FERC, or if filed unexecuted, upon the date specified by FERC.

**Electric Generating Unit** shall mean an individual electric generator and its associated plant and apparatus whose electrical output is capable of being separately identified and metered.

**Emergency Condition** shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the CAISO, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the CAISO Controlled Grid or the electric systems of others to which the CAISO Controlled Grid is directly connected; (3) that, in the case of the Participating TO, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Participating TO's Transmission System, Participating TO's Interconnection Facilities, Distribution System, or the electric systems of others to which the Participating TO's electric system is directly connected; or (4) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions; provided, that Interconnection Customer is not obligated by this LGIA to possess black start capability.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**Federal Power Act** shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a et seq.

**FERC** shall mean the Federal Energy Regulatory Commission or its successor.

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**Generating Facility** shall mean the Interconnection Customer's Electric Generating Unit(s) used for the production of electricity identified in the Interconnection Customer's Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Generating Facility Capacity** shall mean the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices.

**Good Utility Practice** shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be any one of a number of the optimum practices, methods, or acts to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** shall mean any federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, CAISO, Participating TO, or any Affiliate thereof.

**Hazardous Substances** shall mean any chemicals, materials or substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "hazardous constituents," "restricted hazardous materials," "extremely hazardous substances," "toxic substances," "radioactive substances," "contaminants," "pollutants," "toxic pollutants" or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**Initial Synchronization Date** shall mean the date upon which an Electric Generating Unit is initially synchronized and upon which Trial Operation begins.

**In-Service Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Participating TO's Interconnection Facilities to obtain back feed power.

**Interconnection Customer's Interconnection Facilities** shall mean all facilities and equipment, as identified in Appendix A of this LGIA, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Participating TO's Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Participating TO's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Participating TO's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Financial Security** shall have the meaning assigned to it in Section 1.2 of the LGIP.

**Interconnection Handbook** shall mean a handbook, developed by the Participating TO and posted on the Participating TO's web site or otherwise made available by the Participating TO, describing technical and operational requirements for wholesale generators and loads connected to the Participating TO's portion of the CAISO Controlled Grid, as such handbook may be modified or superseded from time to time. Participating TO's standards contained in the Interconnection Handbook shall be deemed consistent with Good Utility Practice and Applicable Reliability Standards. In the event of a conflict between the terms of this LGIA and the terms of the Participating TO's Interconnection Handbook, the terms in this LGIA shall apply.

**Interconnection Request** shall mean a request, in the form of Appendix 1 to the Large Generator Interconnection Procedures, in accordance with the CAISO Tariff.

**Interconnection Service** shall mean the service provided by the Participating TO and CAISO associated with interconnecting the Interconnection Customer's Generating Facility to the Participating TO's Transmission System and enabling the CAISO Controlled Grid to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of this LGIA, the Participating TO's Transmission Owner Tariff, and the CAISO Tariff.

**Interconnection Study** shall mean either of the following studies: the Phase I Interconnection Study or the Phase II Interconnection Study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), pursuant to the Large Generator Interconnection Procedures.

**IRS** shall mean the Internal Revenue Service.

**Large Generating Facility** shall mean a Generating Facility having a Generating Facility Capacity of more than 20 MW.

**Large Generator Interconnection Procedures (LGIP)** shall mean the CAISO protocol that sets forth the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that is included in CAISO Tariff Appendix Y.

**Large Generator Interconnection Study Process Agreement** shall mean the agreement between the Interconnection Customer and the CAISO for the conduct of the Interconnection Studies.

**Loss** shall mean any and all damages, losses, and claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties.

**Material Modification** shall mean those modifications that have a material impact on the cost or timing of any Interconnection Request or any other valid interconnection request with a later queue priority date.

**Metering Equipment** shall mean all metering equipment installed or to be installed for measuring the output of the Generating Facility pursuant to this LGIA at the metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

**NERC** shall mean the North American Electric Reliability Council or its successor organization.

**Network Upgrades** shall be Participating TO's Delivery Network Upgrades and Participating TO's Reliability Network Upgrades.

**Operational Control** shall mean the rights of the CAISO under the Transmission Control Agreement and the CAISO Tariff to direct the parties to the Transmission Control Agreement how to operate their transmission lines and facilities and other electric plant affecting the reliability of those lines and facilities for the purpose of affording comparable non-discriminatory transmission access and meeting applicable reliability criteria.

**Participating TO's Delivery Network Upgrades** shall mean the additions, modifications, and upgrades to the Participating TO's Transmission System at or beyond the Point of Interconnection, other than Reliability Network Upgrades, identified in the Interconnection Studies, as identified in Appendix A, to relieve constraints on the CAISO Controlled Grid.

**Participating TO's Interconnection Facilities** shall mean all facilities and equipment owned, controlled or operated by the Participating TO from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to this LGIA, including any modifications, additions or upgrades to such facilities and equipment. Participating TO's Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Participating TO's Reliability Network Upgrades** shall mean the additions, modifications, and upgrades to the Participating TO's Transmission System at or beyond the Point of Interconnection, identified in the Interconnection Studies, as identified in Appendix A, necessary to interconnect the Large Generating Facility safely and reliably to the Participating TO's Transmission System, which would not have been necessary but for the interconnection of the Large Generating Facility, including additions, modifications, and upgrades necessary to remedy short circuit or stability problems resulting from the interconnection of the Large Generating Facility to the Participating TO's Transmission System. Participating TO's Reliability Network Upgrades also include, consistent with Applicable Reliability Standards and Applicable Reliability Council practice, the Participating TO's facilities necessary to mitigate any adverse impact the Large Generating Facility's interconnection may have on a path's Applicable Reliability Council rating. Participating TO's Reliability Network Upgrades do not include any Participating TO's Delivery Network Upgrades.

**Participating TO's Transmission System** shall mean the facilities owned and operated by the Participating TO and that have been placed under the CAISO's Operational Control, which facilities form part of the CAISO Controlled Grid.

**Party or Parties** shall mean the Participating TO, CAISO, Interconnection Customer or the applicable combination of the above.

**Phase I Interconnection Study** shall mean the engineering study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), that evaluates the impact of the proposed interconnection on the safety and reliability of the Participating TO's Transmission System and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility(ies) were interconnected without identified project modifications or system modifications, as provided in the On-Peak Deliverability Assessment (as defined in the CAISO Tariff), and other potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Large Generator Interconnection Procedures. The study will also identify the approximate total costs, based on per unit costs, of mitigating these impacts, along with an equitable allocation of those costs to Interconnection Customers for their individual Generating Facilities.

**Phase II Interconnection Study** shall mean an engineering and operational study conducted or caused to be performed by the CAISO once per calendar year, in coordination with the applicable Participating TO(s), to determine the Point of Interconnection and a list of facilities (including the Participating TO's Interconnection Facilities, Network Upgrades, Distribution Upgrades, and Stand Alone Network Upgrades), the cost of those facilities, and the time required to interconnect the Generating Facility(ies) with the Participating TO's Transmission System.

**Point of Change of Ownership** shall mean the point, as set forth in Appendix A to this LGIA, where the Interconnection Customer's Interconnection Facilities connect to the Participating TO's Interconnection Facilities.

**Point of Interconnection** shall mean the point, as set forth in Appendix A to this LGIA, where the Interconnection Facilities connect to the Participating TO's Transmission System.

**QF PGA** shall mean a Qualifying Facility Participating Generator Agreement specifying the special provisions for the operating relationship between a Qualifying Facility and the CAISO, a pro forma version of which is set forth in Appendix B.3 of the CAISO Tariff.



**Qualifying Facility** shall mean a qualifying cogeneration facility or qualifying small power production facility, as defined in the Code of Federal Regulations, Title 18, Part 292 (18 C.F.R. §292).

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under this LGIA, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Scoping Meeting** shall mean the meeting among representatives of the Interconnection Customer, the Participating TO(s), other Affected Systems, and the CAISO conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

**Stand Alone Network Upgrades** shall mean Network Upgrades that the Interconnection Customer may construct without affecting day-to-day operations of the CAISO Controlled Grid or Affected Systems during their construction. The Participating TO, the CAISO, and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to this LGIA.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, that protects (1) the Participating TO's Transmission System, Participating TO's Interconnection Facilities, CAISO Controlled Grid, and Affected Systems from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the CAISO Controlled Grid, Participating TO's Interconnection Facilities, and Affected Systems or on other delivery systems or other generating systems to which the CAISO Controlled Grid is directly connected.

**Transmission Control Agreement** shall mean CAISO FERC Electric Tariff No. 7.

**Trial Operation** shall mean the period during which the Interconnection Customer is engaged in on-site test operations and commissioning of an Electric Generating Unit prior to Commercial Operation.

## ARTICLE 2. EFFECTIVE DATE, TERM AND TERMINATION

**2.1 Effective Date.** This LGIA shall become effective upon execution by all Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by FERC. The CAISO and Participating TO shall promptly file this LGIA with FERC upon execution in accordance with Article 3.1, if required.

**2.2 Term of Agreement.** Subject to the provisions of Article 2.3, this LGIA shall remain in effect for a period of \_\_\_\_ years from the Effective Date (Term Specified in Individual Agreements to be ten (10) years or such other longer period as the Interconnection Customer may request) and shall be automatically renewed for each successive one-year period thereafter.

## 2.3 Termination Procedures.

**2.3.1 Written Notice.** This LGIA may be terminated by the Interconnection Customer after giving the CAISO and the Participating TO ninety (90) Calendar Days advance written notice, or by the CAISO and the Participating TO notifying FERC after the Generating Facility permanently ceases Commercial Operation.

**2.3.2 Default.** A Party may terminate this LGIA in accordance with Article 17.

**2.3.3 Suspension of Work.** This LGIA may be deemed terminated in accordance with Article 5.16.

**2.3.4** Notwithstanding Articles 2.3.1, 2.3.2, and 2.3.3, no termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this LGIA (if applicable), which notice has been accepted for filing by FERC, and the Interconnection Customer has fulfilled its termination cost obligations under Article 2.4.

**2.4 Termination Costs.** Immediately upon the other Parties' receipt of a notice of the termination of this LGIA pursuant to Article 2.3 above, the CAISO and the Participating TO will determine the total cost responsibility of the Interconnection Customer. If, as of the date of the other Parties' receipt of the notice of termination, the Interconnection Customer has not already paid its share of Network Upgrade costs, as set forth in Appendix G to this LGIA, the Participating TO will liquidate the Interconnection Customer's Interconnection Financial Security associated with its cost responsibility for Network Upgrades, in accordance with Section 9.4 of the LGIP.

The Interconnection Customer will also be responsible for all costs incurred or irrevocably committed to be incurred in association with the construction of the Participating TO's Interconnection Facilities (including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment) and other such expenses, including any Distribution Upgrades for which the Participating TO or CAISO has incurred expenses or has irrevocably committed to incur expenses and has not been reimbursed by the Interconnection Customer, as of the date of the other Parties' receipt of the notice of termination, subject to the limitations set forth in this Article 2.4. Nothing in this Article 2.4 shall limit the Parties' rights under Article 17. If, as of the date of the other Parties' receipt of the notice of termination, the Interconnection Customer has not already reimbursed the Participating TO and the CAISO for costs incurred to construct the Participating TO's Interconnection Facilities, the Participating TO will liquidate the Interconnection Customer's Interconnection Financial Security associated with the construction of the Participating TO's Interconnection Facilities, in accordance with Section 9.4 of the LGIP. If the amount of the Interconnection Financial Security liquidated by the Participating TO under this Article 2.4 is insufficient to compensate the CAISO and the Participating TO for actual costs associated with the construction of the Participating TO's Interconnection Facilities contemplated in this Article, any additional amounts will be the responsibility of the Interconnection Customer, subject to the provisions of Section 9.4 of the LGIP. Any such additional amounts due from the Interconnection Customer beyond the amounts covered by its Interconnection Financial Security will be due to the Participating TO immediately upon termination of this LGIA in accordance with Section 9.4 of the LGIP.

If the amount of the Interconnection Financial Security exceeds the Interconnection Customer's cost responsibility under Section 9.4 of the LGIP, any excess amount will be released to the Interconnection Customer in accordance with Section 9.4 of the LGIP.

- 2.4.1** Notwithstanding the foregoing, in the event of termination by a Party, all Parties shall use commercially Reasonable Efforts to mitigate the costs, damages and charges arising as a consequence of termination. With respect to any portion of the Participating TO's Interconnection Facilities that have not yet been constructed or installed, the Participating TO shall to the extent possible and with the Interconnection Customer's authorization cancel any pending orders of, or return, any materials or equipment for, or contracts for construction of, such facilities; provided that in the event the Interconnection Customer elects not to authorize such cancellation, the Interconnection Customer shall assume all payment obligations with respect to such materials, equipment, and contracts, and the Participating TO shall deliver such material and equipment, and, if necessary, assign such contracts, to the Interconnection Customer as soon as practicable, at the Interconnection Customer's expense. To the extent that the Interconnection Customer has already paid the Participating TO for any or all such costs of materials or equipment not taken by the Interconnection Customer, the Participating TO shall promptly refund such amounts to the Interconnection Customer, less any costs, including penalties, incurred by the Participating TO to cancel any pending orders of or return such materials, equipment, or contracts.
- 2.4.2** The Participating TO may, at its option, retain any portion of such materials, equipment, or facilities that the Interconnection Customer chooses not to accept delivery of, in which case the Participating TO shall be responsible for all costs associated with procuring such materials, equipment, or facilities.
- 2.4.3** With respect to any portion of the Interconnection Facilities, and any other facilities already installed or constructed pursuant to the terms of this LGIA, Interconnection Customer shall be responsible for all costs associated with the removal, relocation or other disposition or retirement of such materials, equipment, or facilities.
- 2.5** **Disconnection.** Upon termination of this LGIA, the Parties will take all appropriate steps to disconnect the Large Generating Facility from the Participating TO's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this LGIA or such non-terminating Party otherwise is responsible for these costs under this LGIA.
- 2.6** **Survival.** This LGIA shall continue in effect after termination to the extent necessary to provide for final billings and payments and for costs incurred hereunder, including billings and payments pursuant to this LGIA; to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this LGIA was in effect; and to permit each Party to have access to the lands of the other Parties pursuant to this LGIA or other applicable agreements, to disconnect, remove or salvage its own facilities and equipment.

### ARTICLE 3. REGULATORY FILINGS AND CAISO TARIFF COMPLIANCE

- 3.1 Filing.** The Participating TO and the CAISO shall file this LGIA (and any amendment hereto) with the appropriate Governmental Authority(ies), if required. The Interconnection Customer may request that any information so provided be subject to the confidentiality provisions of Article 22. If the Interconnection Customer has executed this LGIA, or any amendment thereto, the Interconnection Customer shall reasonably cooperate with the Participating TO and CAISO with respect to such filing and to provide any information reasonably requested by the Participating TO or CAISO needed to comply with applicable regulatory requirements.
- 3.2 Agreement Subject to CAISO Tariff.** The Interconnection Customer will comply with all applicable provisions of the CAISO Tariff, including the LGIP.
- 3.3 Relationship Between this LGIA and the CAISO Tariff.** With regard to rights and obligations between the Participating TO and the Interconnection Customer, if and to the extent a matter is specifically addressed by a provision of this LGIA (including any appendices, schedules or other attachments to this LGIA), the provisions of this LGIA shall govern. If and to the extent a provision of this LGIA is inconsistent with the CAISO Tariff and dictates rights and obligations between the CAISO and the Participating TO or the CAISO and the Interconnection Customer, the CAISO Tariff shall govern.
- 3.4 Relationship Between this LGIA and the QF PGA.** With regard to the rights and obligations of a Qualifying Facility that has entered into a QF PGA with the CAISO and has entered into this LGIA, if and to the extent a matter is specifically addressed by a provision of the QF PGA that is inconsistent with this LGIA, the terms of the QF PGA shall govern.

### ARTICLE 4. SCOPE OF SERVICE

- 4.1 Interconnection Service.** Interconnection Service allows the Interconnection Customer to connect the Large Generating Facility to the Participating TO's Transmission System and be eligible to deliver the Large Generating Facility's output using the available capacity of the CAISO Controlled Grid. To the extent the Interconnection Customer wants to receive Interconnection Service, the Participating TO shall construct facilities identified in Appendices A and C that the Participating TO is responsible to construct.

Interconnection Service does not necessarily provide the Interconnection Customer with the capability to physically deliver the output of its Large Generating Facility to any particular load on the CAISO Controlled Grid without incurring congestion costs. In the event of transmission constraints on the CAISO Controlled Grid, the Interconnection Customer's Large Generating Facility shall be subject to the applicable congestion management procedures in the CAISO Tariff in the same manner as all other resources.

- 4.2 Provision of Service.** The Participating TO and the CAISO shall provide Interconnection Service for the Large Generating Facility.

- 4.3 Performance Standards.** Each Party shall perform all of its obligations under this LGIA in accordance with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice, and to the extent a Party is required or prevented or limited in taking any action by such regulations and standards, such Party shall not be deemed to be in Breach of this LGIA for its compliance therewith. If such Party is the CAISO or Participating TO, then that Party shall amend the LGIA and submit the amendment to FERC for approval.
- 4.4 No Transmission Service.** The execution of this LGIA does not constitute a request for, nor the provision of, any transmission service under the CAISO Tariff, and does not convey any right to deliver electricity to any specific customer or point of delivery.
- 4.5 Interconnection Customer Provided Services.** The services provided by Interconnection Customer under this LGIA are set forth in Article 9.6 and Article 13.5.1. Interconnection Customer shall be paid for such services in accordance with Article 11.6.

#### **ARTICLE 5. INTERCONNECTION FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION**

Interconnection Facilities, Network Upgrades, and Distribution Upgrades shall be studied, designed, and constructed pursuant to Good Utility Practice. Such studies, design and construction shall be based on the assumed accuracy and completeness of all technical information received by the Participating TO and the CAISO from the Interconnection Customer associated with interconnecting the Large Generating Facility.

- 5.1 Options.** Unless otherwise mutually agreed among the Parties, the Interconnection Customer shall select the In-Service Date, Initial Synchronization Date, and Commercial Operation Date; and either Standard Option or Alternate Option set forth below for completion of the Participating TO's Interconnection Facilities and Network Upgrades as set forth in Appendix A, Interconnection Facilities, Network Upgrades, and Distribution Upgrades, and such dates and selected option shall be set forth in Appendix B, Milestones.
- 5.1.1 Standard Option.** The Participating TO shall design, procure, and construct the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, using Reasonable Efforts to complete the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades by the dates set forth in Appendix B, Milestones. The Participating TO shall not be required to undertake any action which is inconsistent with its standard safety practices, its material and equipment specifications, its design criteria and construction procedures, its labor agreements, and Applicable Laws and Regulations. In the event the Participating TO reasonably expects that it will not be able to complete the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades by the specified dates, the Participating TO shall promptly provide written notice to the Interconnection Customer and the CAISO and shall undertake Reasonable Efforts to meet the earliest dates thereafter.

- 5.1.2 Alternate Option.** If the dates designated by the Interconnection Customer are acceptable to the Participating TO, the Participating TO shall so notify the Interconnection Customer within thirty (30) Calendar Days, and shall assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities by the designated dates.

If the Participating TO subsequently fails to complete the Participating TO's Interconnection Facilities by the In-Service Date, to the extent necessary to provide back feed power; or fails to complete Network Upgrades by the Initial Synchronization Date to the extent necessary to allow for Trial Operation at full power output, unless other arrangements are made by the Parties for such Trial Operation; or fails to complete the Network Upgrades by the Commercial Operation Date, as such dates are reflected in Appendix B, Milestones; the Participating TO shall pay the Interconnection Customer liquidated damages in accordance with Article 5.3, Liquidated Damages, provided, however, the dates designated by the Interconnection Customer shall be extended day for day for each day that the CAISO refuses to grant clearances to install equipment.

- 5.1.3 Option to Build.** If the dates designated by the Interconnection Customer are not acceptable to the Participating TO, the Participating TO shall so notify the Interconnection Customer within thirty (30) Calendar Days, and unless the Parties agree otherwise, the Interconnection Customer shall have the option to assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades. If the Interconnection Customer elects to exercise its option to assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, it shall so notify the Participating TO within thirty (30) Calendar Days of receipt of the Participating TO's notification that the designated dates are not acceptable to the Participating TO. The Participating TO, CAISO, and Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Appendix A to this LGIA. Except for Stand Alone Network Upgrades, the Interconnection Customer shall have no right to construct Network Upgrades under this option.

- 5.1.4 Negotiated Option.** If the Interconnection Customer elects not to exercise its option under Article 5.1.3, Option to Build, the Interconnection Customer shall so notify the Participating TO within thirty (30) Calendar Days of receipt of the Participating TO's notification that the designated dates are not acceptable to the Participating TO, and the Parties shall in good faith attempt to negotiate terms and conditions (including revision of the specified dates and liquidated damages, the provision of incentives or the procurement and construction of a portion of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades by the Interconnection Customer) pursuant to which the Participating TO is responsible for the design, procurement and construction of the Participating TO's Interconnection Facilities and Network Upgrades. If the Parties are unable to reach agreement on such terms and conditions, the Participating TO shall assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Network Upgrades pursuant to Article 5.1.1, Standard Option.

**5.2 General Conditions Applicable to Option to Build.** If the Interconnection Customer assumes responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades,

(1) the Interconnection Customer shall engineer, procure equipment, and construct the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by the Participating TO;

(2) The Interconnection Customer's engineering, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law to which the Participating TO would be subject in the engineering, procurement or construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

(3) the Participating TO shall review, and the Interconnection Customer shall obtain the Participating TO's approval of, the engineering design, equipment acceptance tests, and the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, which approval shall not be unreasonably withheld, and the CAISO may, at its option, review the engineering design, equipment acceptance tests, and the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

(4) prior to commencement of construction, the Interconnection Customer shall provide to the Participating TO, with a copy to the CAISO for informational purposes, a schedule for construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, and shall promptly respond to requests for information from the Participating TO;

(5) at any time during construction, the Participating TO shall have the right to gain unrestricted access to the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;

(6) at any time during construction, should any phase of the engineering, equipment procurement, or construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by the Participating TO, the Interconnection Customer shall be obligated to remedy deficiencies in that portion of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

(7) the Interconnection Customer shall indemnify the CAISO and Participating TO for claims arising from the Interconnection Customer's construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to Article 18.1 Indemnity;

(8) The Interconnection Customer shall transfer control of the Participating TO's Interconnection Facilities to the Participating TO and shall transfer Operational Control of Stand Alone Network Upgrades to the CAISO;

(9) Unless the Parties otherwise agree, the Interconnection Customer shall transfer ownership of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the Participating TO. As soon as reasonably practicable, but within twelve months after completion of the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, the Interconnection Customer shall provide an invoice of the final cost of the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the Participating TO, which invoice shall set forth such costs in sufficient detail to enable the Participating TO to reflect the proper costs of such facilities in its transmission rate base and to identify the investment upon which refunds will be provided;

(10) the Participating TO shall accept for operation and maintenance the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2; and

(11) The Interconnection Customer's engineering, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of the "Option to Build" conditions set forth in Appendix C. Interconnection Customer shall deliver to the Participating TO "as-built" drawings, information, and any other documents that are reasonably required by the Participating TO to assure that the Interconnection Facilities and Stand-Alone Network Upgrades are built to the standards and specifications required by the Participating TO.

**5.3 Liquidated Damages.** The actual damages to the Interconnection Customer, in the event the Participating TO's Interconnection Facilities or Network Upgrades are not completed by the dates designated by the Interconnection Customer and accepted by the Participating TO pursuant to subparagraphs 5.1.2 or 5.1.4, above, may include Interconnection Customer's fixed operation and maintenance costs and lost opportunity costs. Such actual damages are uncertain and impossible to determine at this time. Because of such uncertainty, any liquidated damages paid by the Participating TO to the Interconnection Customer in the event that the Participating TO does not complete any portion of the Participating TO's Interconnection Facilities or Network Upgrades by the applicable dates, shall be an amount equal to  $\frac{1}{2}$  of 1 percent per day of the actual cost of the Participating TO's Interconnection Facilities and Network Upgrades, in the aggregate, for which the Participating TO has assumed responsibility to design, procure and construct.

However, in no event shall the total liquidated damages exceed 20 percent of the actual cost of the Participating TO's Interconnection Facilities and Network Upgrades for which the Participating TO has assumed responsibility to design, procure, and construct. The foregoing payments will be made by the Participating TO to the Interconnection Customer as just compensation for the damages caused to the Interconnection Customer, which actual damages are uncertain and impossible to determine at this time, and as reasonable liquidated damages, but not as a penalty or a method to secure performance of this LGIA. Liquidated damages, when the Parties agree to them, are the exclusive remedy for the Participating TO's failure to meet its schedule.



No liquidated damages shall be paid to the Interconnection Customer if: (1) the Interconnection Customer is not ready to commence use of the Participating TO's Interconnection Facilities or Network Upgrades to take the delivery of power for the Electric Generating Unit's Trial Operation or to export power from the Electric Generating Unit on the specified dates, unless the Interconnection Customer would have been able to commence use of the Participating TO's Interconnection Facilities or Network Upgrades to take the delivery of power for Electric Generating Unit's Trial Operation or to export power from the Electric Generating Unit, but for the Participating TO's delay; (2) the Participating TO's failure to meet the specified dates is the result of the action or inaction of the Interconnection Customer or any other interconnection customer who has entered into an interconnection agreement with the CAISO and/or Participating TO, action or inaction by the CAISO, or any cause beyond the Participating TO's reasonable control or reasonable ability to cure; (3) the Interconnection Customer has assumed responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades; or (4) the Parties have otherwise agreed.

In no event shall the CAISO have any responsibility or liability to the Interconnection Customer for liquidated damages pursuant to the provisions of this Article 5.3.

**5.4 Power System Stabilizers.** The Interconnection Customer shall procure, install, maintain and operate Power System Stabilizers in accordance with Applicable Reliability Standards, the guidelines and procedures established by the Applicable Reliability Council, and the provisions of Section 4.6.5.1 of the CAISO Tariff. The CAISO reserves the right to establish reasonable minimum acceptable settings for any installed Power System Stabilizers, subject to the design and operating limitations of the Large Generating Facility. If the Large Generating Facility's Power System Stabilizers are removed from service or not capable of automatic operation, the Interconnection Customer shall immediately notify the CAISO and the Participating TO and restore the Power System Stabilizers to operation as soon as possible. The CAISO shall have the right to order the reduction in output or disconnection of the Large Generating Facility if the reliability of the CAISO Controlled Grid would be adversely affected as a result of improperly tuned Power System Stabilizers. The requirements of this Article 5.4 shall not apply to wind generators of the induction type.

**5.5 Equipment Procurement.** If responsibility for construction of the Participating TO's Interconnection Facilities or Network Upgrades is to be borne by the Participating TO, then the Participating TO shall commence design of the Participating TO's Interconnection Facilities or Network Upgrades and procure necessary equipment as soon as practicable after all of the following conditions are satisfied, unless the Parties otherwise agree in writing:

**5.5.1** The CAISO, in coordination with the applicable Participating TO(s), has completed the Phase II Interconnection Study pursuant to the Large Generator Interconnection Facilities Study Process Agreement;

**5.5.2** The Participating TO has received written authorization to proceed with design and procurement from the Interconnection Customer by the date specified in Appendix B, Milestones; and

**5.5.3** The Interconnection Customer has provided security to the Participating TO in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.

- 5.6 Construction Commencement.** The Participating TO shall commence construction of the Participating TO's Interconnection Facilities and Network Upgrades for which it is responsible as soon as practicable after the following additional conditions are satisfied:
- 5.6.1** Approval of the appropriate Governmental Authority has been obtained for any facilities requiring regulatory approval;
  - 5.6.2** Necessary real property rights and rights-of-way have been obtained, to the extent required for the construction of a discrete aspect of the Participating TO's Interconnection Facilities and Network Upgrades;
  - 5.6.3** The Participating TO has received written authorization to proceed with construction from the Interconnection Customer by the date specified in Appendix B, Milestones; and
  - 5.6.4** The Interconnection Customer has provided payment and security to the Participating TO in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.
- 5.7 Work Progress.** The Parties will keep each other advised periodically as to the progress of their respective design, procurement and construction efforts. Any Party may, at any time, request a progress report from another Party. If, at any time, the Interconnection Customer determines that the completion of the Participating TO's Interconnection Facilities will not be required until after the specified In-Service Date, the Interconnection Customer will provide written notice to the Participating TO and CAISO of such later date upon which the completion of the Participating TO's Interconnection Facilities will be required.
- 5.8 Information Exchange.** As soon as reasonably practicable after the Effective Date, the Parties shall exchange information regarding the design and compatibility of the Interconnection Customer's Interconnection Facilities and Participating TO's Interconnection Facilities and compatibility of the Interconnection Facilities with the Participating TO's Transmission System, and shall work diligently and in good faith to make any necessary design changes.
- 5.9 Limited Operation.** If any of the Participating TO's Interconnection Facilities or Network Upgrades are not reasonably expected to be completed prior to the Commercial Operation Date of the Electric Generating Unit, the Participating TO and/or CAISO, as applicable, shall, upon the request and at the expense of the Interconnection Customer, perform operating studies on a timely basis to determine the extent to which the Electric Generating Unit and the Interconnection Customer's Interconnection Facilities may operate prior to the completion of the Participating TO's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and this LGIA. The Participating TO and CAISO shall permit Interconnection Customer to operate the Electric Generating Unit and the Interconnection Customer's Interconnection Facilities in accordance with the results of such studies.
- 5.10 Interconnection Customer's Interconnection Facilities.** The Interconnection Customer shall, at its expense, design, procure, construct, own and install the Interconnection Customer's Interconnection Facilities, as set forth in Appendix A.

- 5.10.1 Large Generating Facility and Interconnection Customer's Interconnection Facilities Specifications.** In addition to the Interconnection Customer's responsibility to submit technical data with its Interconnection Request as required by Section 3.5.1 of the LGIP, the Interconnection Customer shall submit all remaining necessary specifications for the Interconnection Customer's Interconnection Facilities and Large Generating Facility, including System Protection Facilities, to the Participating TO and the CAISO at least one hundred eighty (180) Calendar Days prior to the Initial Synchronization Date; and final specifications for review and comment at least ninety (90) Calendar Days prior to the Initial Synchronization Date. The Participating TO and the CAISO shall review such specifications pursuant to this LGIA and the LGIP to ensure that the Interconnection Customer's Interconnection Facilities and Large Generating Facility are compatible with the technical specifications, operational control, safety requirements, and any other applicable requirements of the Participating TO and the CAISO and comment on such specifications within thirty (30) Calendar Days of the Interconnection Customer's submission. All specifications provided hereunder shall be deemed confidential.
- 5.10.2 Participating TO's and CAISO's Review.** The Participating TO's and the CAISO's review of the Interconnection Customer's final specifications shall not be construed as confirming, endorsing, or providing a warranty as to the design, fitness, safety, durability or reliability of the Large Generating Facility, or the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall make such changes to the Interconnection Customer's Interconnection Facilities as may reasonably be required by the Participating TO or the CAISO, in accordance with Good Utility Practice, to ensure that the Interconnection Customer's Interconnection Facilities are compatible with the technical specifications, Operational Control, and safety requirements of the Participating TO or the CAISO.
- 5.10.3 Interconnection Customer's Interconnection Facilities Construction.** The Interconnection Customer's Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Participating TO and Interconnection Customer agree on another mutually acceptable deadline, the Interconnection Customer shall deliver to the Participating TO and CAISO "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities and the Electric Generating Unit(s), such as: a one-line diagram, a site plan showing the Large Generating Facility and the Interconnection Customer's Interconnection Facilities, plan and elevation drawings showing the layout of the Interconnection Customer's Interconnection Facilities, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with the Interconnection Customer's step-up transformers, the facilities connecting the Large Generating Facility to the step-up transformers and the Interconnection Customer's Interconnection Facilities, and the impedances (determined by factory tests) for the associated step-up transformers and the Electric Generating Units. The Interconnection Customer shall provide the Participating TO and the CAISO specifications for the excitation system, automatic voltage regulator, Large Generating Facility control and protection settings, transformer tap settings, and communications, if applicable. Any deviations from the relay settings, machine specifications, and other specifications originally submitted by the Interconnection Customer shall be assessed by the Participating TO and the CAISO pursuant to the appropriate provisions of this LGIA and the LGIP.

**5.10.4 Interconnection Customer to Meet Requirements of the Participating TO's Interconnection Handbook.** The Interconnection Customer shall comply with the Participating TO's Interconnection Handbook.

**5.11 Participating TO's Interconnection Facilities Construction.** The Participating TO's Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Upon request, within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Participating TO and Interconnection Customer agree on another mutually acceptable deadline, the Participating TO shall deliver to the Interconnection Customer and the CAISO the following "as-built" drawings, information and documents for the Participating TO's Interconnection Facilities [include appropriate drawings and relay diagrams].

The Participating TO will obtain control for operating and maintenance purposes of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades upon completion of such facilities. Pursuant to Article 5.2, the CAISO will obtain Operational Control of the Stand Alone Network Upgrades prior to the Commercial Operation Date.

**5.12 Access Rights.** Upon reasonable notice and supervision by a Party, and subject to any required or necessary regulatory approvals, a Party ("Granting Party") shall furnish at no cost to the other Party ("Access Party") any rights of use, licenses, rights of way and easements with respect to lands owned or controlled by the Granting Party, its agents (if allowed under the applicable agency agreement), or any Affiliate, that are necessary to enable the Access Party to obtain ingress and egress to construct, operate, maintain, repair, test (or witness testing), inspect, replace or remove facilities and equipment to: (i) interconnect the Large Generating Facility with the Participating TO's Transmission System; (ii) operate and maintain the Large Generating Facility, the Interconnection Facilities and the Participating TO's Transmission System; and (iii) disconnect or remove the Access Party's facilities and equipment upon termination of this LGIA. In exercising such licenses, rights of way and easements, the Access Party shall not unreasonably disrupt or interfere with normal operation of the Granting Party's business and shall adhere to the safety rules and procedures established in advance, as may be changed from time to time, by the Granting Party and provided to the Access Party.

**5.13 Lands of Other Property Owners.** If any part of the Participating TO's Interconnection Facilities and/or Network Upgrades are to be installed on property owned by persons other than the Interconnection Customer or Participating TO, the Participating TO shall at the Interconnection Customer's expense use efforts, similar in nature and extent to those that it typically undertakes on its own behalf or on behalf of its Affiliates, including use of its eminent domain authority, and to the extent consistent with state law, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove the Participating TO's Interconnection Facilities and/or Network Upgrades upon such property.

**5.14 Permits.** Participating TO and Interconnection Customer shall cooperate with each other in good faith in obtaining all permits, licenses and authorization that are necessary to accomplish the interconnection in compliance with Applicable Laws and Regulations. With respect to this paragraph, the Participating TO shall provide permitting assistance to the Interconnection Customer comparable to that provided to the Participating TO's own, or an Affiliate's generation.

**5.15 Early Construction of Base Case Facilities.** The Interconnection Customer may request the Participating TO to construct, and the Participating TO shall construct, using Reasonable Efforts to accommodate Interconnection Customer's In-Service Date, all or any portion of any Network Upgrades required for Interconnection Customer to be interconnected to the Participating TO's Transmission System which are included in the Base Case of the Interconnection Studies for the Interconnection Customer, and which also are required to be constructed for another interconnection customer, but where such construction is not scheduled to be completed in time to achieve Interconnection Customer's In-Service Date.

**5.16 Suspension.** The Interconnection Customer reserves the right, upon written notice to the Participating TO and the CAISO, to suspend at any time all work associated with the construction and installation of the Participating TO's Interconnection Facilities, Network Upgrades, and/or Distribution Upgrades required under this LGIA, other than Network Upgrades identified in the Phase II Interconnection Study as common to multiple Generating Facilities, with the condition that the Participating TO's electrical system and the CAISO Controlled Grid shall be left in a safe and reliable condition in accordance with Good Utility Practice and the Participating TO's safety and reliability criteria and the CAISO's Applicable Reliability Standards. In such event, the Interconnection Customer shall be responsible for all reasonable and necessary costs which the Participating TO (i) has incurred pursuant to this LGIA prior to the suspension and (ii) incurs in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Participating TO's electric system during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and labor contracts which the Participating TO cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, the Participating TO shall obtain Interconnection Customer's authorization to do so.

The Participating TO shall invoice the Interconnection Customer for such costs pursuant to Article 12 and shall use due diligence to minimize its costs. In the event Interconnection Customer suspends work required under this LGIA pursuant to this Article 5.16, and has not requested the Participating TO to recommence the work or has not itself recommenced work required under this LGIA in time to ensure that the new projected Commercial Operation Date for the full Generating Facility Capacity of the Large Generating Facility is no more than three (3) years from the Commercial Operation Date identified in Appendix B hereto, this LGIA shall be deemed terminated and the Interconnection Customer's responsibility for costs will be determined in accordance with Section 2.4 of this LGIA. The suspension period shall begin on the date the suspension is requested, or the date of the written notice to the Participating TO and the CAISO, if no effective date is specified.

**5.17 Taxes.**

**5.17.1 Interconnection Customer Payments Not Taxable.** The Parties intend that all payments or property transfers made by the Interconnection Customer to the Participating TO for the installation of the Participating TO's Interconnection Facilities and the Network Upgrades shall be non-taxable, either as contributions to capital, or as a refundable advance, in accordance with the Internal Revenue Code and any applicable state income tax laws and shall not be taxable as contributions in aid of construction or otherwise under the Internal Revenue Code and any applicable state income tax laws.

**5.17.2 Representations And Covenants.** In accordance with IRS Notice 2001-82 and IRS Notice 88-129, the Interconnection Customer represents and covenants that (i) ownership of the electricity generated at the Large Generating Facility will pass to another party prior to the transmission of the electricity on the CAISO Controlled Grid, (ii) for income tax purposes, the amount of any payments and the cost of any property transferred to the Participating TO for the Participating TO's Interconnection Facilities will be capitalized by the Interconnection Customer as an intangible asset and recovered using the straight-line method over a useful life of twenty (20) years, and (iii) any portion of the Participating TO's Interconnection Facilities that is a "dual-use intertie," within the meaning of IRS Notice 88-129, is reasonably expected to carry only a de minimis amount of electricity in the direction of the Large Generating Facility. For this purpose, "de minimis amount" means no more than 5 percent of the total power flows in both directions, calculated in accordance with the "5 percent test" set forth in IRS Notice 88-129. This is not intended to be an exclusive list of the relevant conditions that must be met to conform to IRS requirements for non-taxable treatment.

At the Participating TO's request, the Interconnection Customer shall provide the Participating TO with a report from an independent engineer confirming its representation in clause (iii), above. The Participating TO represents and covenants that the cost of the Participating TO's Interconnection Facilities paid for by the Interconnection Customer without the possibility of refund or credit will have no net effect on the base upon which rates are determined.

**5.17.3 Indemnification for the Cost Consequence of Current Tax Liability Imposed Upon the Participating TO.** Notwithstanding Article 5.17.1, the Interconnection Customer shall protect, indemnify and hold harmless the Participating TO from the cost consequences of any current tax liability imposed against the Participating TO as the result of payments or property transfers made by the Interconnection Customer to the Participating TO under this LGIA for Interconnection Facilities, as well as any interest and penalties, other than interest and penalties attributable to any delay caused by the Participating TO.

The Participating TO shall not include a gross-up for the cost consequences of any current tax liability in the amounts it charges the Interconnection Customer under this LGIA unless (i) the Participating TO has determined, in good faith, that the payments or property transfers made by the Interconnection Customer to the Participating TO should be reported as income subject to taxation or (ii) any Governmental Authority directs the Participating TO to report payments or property as income subject to taxation; provided, however, that the Participating TO may require the Interconnection Customer to provide security for Interconnection Facilities, in a form reasonably acceptable to the Participating TO (such as a parental guarantee or a letter of credit), in an amount equal to the cost consequences of any current tax liability under this Article 5.17. The Interconnection Customer shall reimburse the Participating TO for such costs on a fully grossed-up basis, in accordance with Article 5.17.4, within thirty (30) Calendar Days of receiving written notification from the Participating TO of the amount due, including detail about how the amount was calculated.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten year testing period and the applicable statute of limitation, as it may be extended by the Participating TO upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event and the payment of any related indemnification obligations as contemplated by this Article 5.17.

**5.17.4 Tax Gross-Up Amount.** The Interconnection Customer's liability for the cost consequences of any current tax liability under this Article 5.17 shall be calculated on a fully grossed-up basis. Except as may otherwise be agreed to by the parties, this means that the Interconnection Customer will pay the Participating TO, in addition to the amount paid for the Interconnection Facilities and Network Upgrades, an amount equal to (1) the current taxes imposed on the Participating TO ("Current Taxes") on the excess of (a) the gross income realized by the Participating TO as a result of payments or property transfers made by the Interconnection Customer to the Participating TO under this LGIA (without regard to any payments under this Article 5.17) (the "Gross Income Amount") over (b) the present value of future tax deductions for depreciation that will be available as a result of such payments or property transfers (the "Present Value Depreciation Amount"), plus (2) an additional amount sufficient to permit the Participating TO to receive and retain, after the payment of all Current Taxes, an amount equal to the net amount described in clause (1).

For this purpose, (i) Current Taxes shall be computed based on the Participating TO's composite federal and state tax rates at the time the payments or property transfers are received and the Participating TO will be treated as being subject to tax at the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting the Participating TO's anticipated tax depreciation deductions as a result of such payments or property transfers by the Participating TO's current weighted average cost of capital. Thus, the formula for calculating the Interconnection Customer's liability to the Participating TO pursuant to this Article 5.17.4 can be expressed as follows:  $(\text{Current Tax Rate} \times (\text{Gross Income Amount} - \text{Present Value of Tax Depreciation})) / (1 - \text{Current Tax Rate})$ . Interconnection Customer's estimated tax liability in the event taxes are imposed shall be stated in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades.

**5.17.5 Private Letter Ruling or Change or Clarification of Law.** At the Interconnection Customer's request and expense, the Participating TO shall file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by the Interconnection Customer to the Participating TO under this LGIA are subject to federal income taxation. The Interconnection Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of the Interconnection Customer's knowledge. The Participating TO and Interconnection Customer shall cooperate in good faith with respect to the submission of such request, provided, however, the Interconnection Customer and the Participating TO explicitly acknowledge (and nothing herein is intended to alter) Participating TO's obligation under law to certify that the facts presented in the ruling request are true, correct and complete.

The Participating TO shall keep the Interconnection Customer fully informed of the status of such request for a private letter ruling and shall execute either a privacy act waiver or a limited power of attorney, in a form acceptable to the IRS, that authorizes the Interconnection Customer to participate in all discussions with the IRS regarding such request for a private letter ruling. The Participating TO shall allow the Interconnection Customer to attend all meetings with IRS officials about the request and shall permit the Interconnection Customer to prepare the initial drafts of any follow-up letters in connection with the request.

**5.17.6 Subsequent Taxable Events.** If, within 10 years from the date on which the relevant Participating TO's Interconnection Facilities are placed in service, (i) the Interconnection Customer Breaches the covenants contained in Article 5.17.2, (ii) a "disqualification event" occurs within the meaning of IRS Notice 88-129, or (iii) this LGIA terminates and the Participating TO retains ownership of the Interconnection Facilities and Network Upgrades, the Interconnection Customer shall pay a tax gross-up for the cost consequences of any current tax liability imposed on the Participating TO, calculated using the methodology described in Article 5.17.4 and in accordance with IRS Notice 90-60.

**5.17.7 Contests.** In the event any Governmental Authority determines that the Participating TO's receipt of payments or property constitutes income that is subject to taxation, the Participating TO shall notify the Interconnection Customer, in writing, within thirty (30) Calendar Days of receiving notification of such determination by a Governmental Authority. Upon the timely written request by the Interconnection Customer and at the Interconnection Customer's sole expense, the Participating TO may appeal, protest, seek abatement of, or otherwise oppose such determination. Upon the Interconnection Customer's written request and sole expense, the Participating TO may file a claim for refund with respect to any taxes paid under this Article 5.17, whether or not it has received such a determination. The Participating TO reserve the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the selection of counsel and compromise or settlement of the claim, but the Participating TO shall keep the Interconnection Customer informed, shall consider in good faith suggestions from the Interconnection Customer about the conduct of the contest, and shall reasonably permit the Interconnection Customer or an Interconnection Customer representative to attend contest proceedings.

The Interconnection Customer shall pay to the Participating TO on a periodic basis, as invoiced by the Participating TO, the Participating TO's documented reasonable costs of prosecuting such appeal, protest, abatement or other contest, including any costs associated with obtaining the opinion of independent tax counsel described in this Article 5.17.7. The Participating TO may abandon any contest if the Interconnection Customer fails to provide payment to the Participating TO within thirty (30) Calendar Days of receiving such invoice.

At any time during the contest, the Participating TO may agree to a settlement either with the Interconnection Customer's consent or, if such consent is refused, after obtaining written advice from independent nationally-recognized tax counsel, selected by the Participating TO, but reasonably acceptable to the Interconnection Customer, that the proposed settlement represents a reasonable settlement given the hazards of litigation.



The Interconnection Customer's obligation shall be based on the amount of the settlement agreed to by the Interconnection Customer, or if a higher amount, so much of the settlement that is supported by the written advice from nationally-recognized tax counsel selected under the terms of the preceding paragraph. The settlement amount shall be calculated on a fully grossed-up basis to cover any related cost consequences of the current tax liability. The Participating TO may also settle any tax controversy without receiving the Interconnection Customer's consent or any such written advice; however, any such settlement will relieve the Interconnection Customer from any obligation to indemnify the Participating TO for the tax at issue in the contest (unless the failure to obtain written advice is attributable to the Interconnection Customer's unreasonable refusal to the appointment of independent tax counsel).

**5.17.8 Refund.** In the event that (a) a private letter ruling is issued to the Participating TO which holds that any amount paid or the value of any property transferred by the Interconnection Customer to the Participating TO under the terms of this LGIA is not subject to federal income taxation, (b) any legislative change or administrative announcement, notice, ruling or other determination makes it reasonably clear to the Participating TO in good faith that any amount paid or the value of any property transferred by the Interconnection Customer to the Participating TO under the terms of this LGIA is not taxable to the Participating TO, (c) any abatement, appeal, protest, or other contest results in a determination that any payments or transfers made by the Interconnection Customer to the Participating TO are not subject to federal income tax, or (d) if the Participating TO receives a refund from any taxing authority for any overpayment of tax attributable to any payment or property transfer made by the Interconnection Customer to the Participating TO pursuant to this LGIA, the Participating TO shall promptly refund to the Interconnection Customer the following:

(i) any payment made by Interconnection Customer under this Article 5.17 for taxes that is attributable to the amount determined to be non-taxable, together with interest thereon,

(ii) interest on any amounts paid by the Interconnection Customer to the Participating TO for such taxes which the Participating TO did not submit to the taxing authority, calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date payment was made by the Interconnection Customer to the date the Participating TO refunds such payment to the Interconnection Customer, and

(iii) with respect to any such taxes paid by the Participating TO, any refund or credit the Participating TO receives or to which it may be entitled from any Governmental Authority, interest (or that portion thereof attributable to the payment described in clause (i), above) owed to the Participating TO for such overpayment of taxes (including any reduction in interest otherwise payable by the Participating TO to any Governmental Authority resulting from an offset or credit); provided, however, that the Participating TO will remit such amount promptly to the Interconnection Customer only after and to the extent that the Participating TO has received a tax refund, credit or offset from any Governmental Authority for any applicable overpayment of income tax related to the Participating TO's Interconnection Facilities.

The intent of this provision is to leave the Parties, to the extent practicable, in the event that no taxes are due with respect to any payment for Interconnection Facilities and Network Upgrades hereunder, in the same position they would have been in had no such tax payments been made.

**5.17.9 Taxes Other Than Income Taxes.** Upon the timely request by the Interconnection Customer, and at the Interconnection Customer's sole expense, the CAISO or Participating TO may appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against the CAISO or Participating TO for which the Interconnection Customer may be required to reimburse the CAISO or Participating TO under the terms of this LGIA. The Interconnection Customer shall pay to the Participating TO on a periodic basis, as invoiced by the Participating TO, the Participating TO's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. The Interconnection Customer, the CAISO, and the Participating TO shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by the Interconnection Customer to the CAISO or Participating TO for such taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, the Interconnection Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by the Participating TO.

**5.18 Tax Status.** Each Party shall cooperate with the others to maintain the other Parties' tax status. Nothing in this LGIA is intended to adversely affect the CAISO's or any Participating TO's tax exempt status with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds.

**5.19 Modification.**

**5.19.1 General.** The Interconnection Customer or the Participating TO may undertake modifications to its facilities, subject to the provisions of this LGIA and the CAISO Tariff. If a Party plans to undertake a modification that reasonably may be expected to affect the other Parties' facilities, that Party shall provide to the other Parties sufficient information regarding such modification so that the other Parties may evaluate the potential impact of such modification prior to commencement of the work. Such information shall be deemed to be confidential hereunder and shall include information concerning the timing of such modifications and whether such modifications are expected to interrupt the flow of electricity from the Large Generating Facility. The Party desiring to perform such work shall provide the relevant drawings, plans, and specifications to the other Parties at least ninety (90) Calendar Days in advance of the commencement of the work or such shorter period upon which the Parties may agree, which agreement shall not unreasonably be withheld, conditioned or delayed.

In the case of Large Generating Facility modifications that do not require the Interconnection Customer to submit an Interconnection Request, the CAISO or Participating TO shall provide, within thirty (30) Calendar Days (or such other time as the Parties may agree), an estimate of any additional modifications to the CAISO Controlled Grid, Participating TO's Interconnection Facilities, Network Upgrades or Distribution Upgrades necessitated by such Interconnection Customer modification and a good faith estimate of the costs thereof. The Participating TO and the CAISO shall determine if a Large Generating Facility modification is a Material Modification in accordance with the LGIP.

**5.19.2 Standards.** Any additions, modifications, or replacements made to a Party's facilities shall be designed, constructed and operated in accordance with this LGIA and Good Utility Practice.

**5.19.3 Modification Costs.** The Interconnection Customer shall not be directly assigned the costs of any additions, modifications, or replacements that the Participating TO makes to the Participating TO's Interconnection Facilities or the Participating TO's Transmission System to facilitate the interconnection of a third party to the Participating TO's Interconnection Facilities or the Participating TO's Transmission System, or to provide transmission service to a third party under the CAISO Tariff. The Interconnection Customer shall be responsible for the costs of any additions, modifications, or replacements to the Interconnection Facilities that may be necessary to maintain or upgrade such Interconnection Facilities consistent with Applicable Laws and Regulations, Applicable Reliability Standards or Good Utility Practice.

## ARTICLE 6. TESTING AND INSPECTION

**6.1 Pre-Commercial Operation Date Testing and Modifications.** Prior to the Commercial Operation Date, the Participating TO shall test the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades and the Interconnection Customer shall test the Large Generating Facility and the Interconnection Customer's Interconnection Facilities to ensure their safe and reliable operation. Similar testing may be required after initial operation. Each Party shall make any modifications to its facilities that are found to be necessary as a result of such testing. The Interconnection Customer shall bear the cost of all such testing and modifications. The Interconnection Customer shall not commence initial parallel operation of an Electric Generating Unit with the Participating TO's Transmission System until the Participating TO provides prior written approval, which approval shall not be unreasonably withheld, for operation of such Electric Generating Unit. The Interconnection Customer shall generate test energy at the Large Generating Facility only if it has arranged for the delivery of such test energy.

**6.2 Post-Commercial Operation Date Testing and Modifications.** Each Party shall at its own expense perform routine inspection and testing of its facilities and equipment in accordance with Good Utility Practice as may be necessary to ensure the continued interconnection of the Large Generating Facility with the Participating TO's Transmission System in a safe and reliable manner. Each Party shall have the right, upon advance written notice, to require reasonable additional testing of the other Party's facilities, at the requesting Party's expense, as may be in accordance with Good Utility Practice.

- 6.3 Right to Observe Testing.** Each Party shall notify the other Parties at least fourteen (14) Calendar Days in advance of its performance of tests of its Interconnection Facilities or Generating Facility. The other Parties have the right, at their own expense, to observe such testing.
- 6.4 Right to Inspect.** Each Party shall have the right, but shall have no obligation to: (i) observe another Party's tests and/or inspection of any of its System Protection Facilities and other protective equipment, including Power System Stabilizers; (ii) review the settings of another Party's System Protection Facilities and other protective equipment; and (iii) review another Party's maintenance records relative to the Interconnection Facilities, the System Protection Facilities and other protective equipment. A Party may exercise these rights from time to time as it deems necessary upon reasonable notice to the other Party. The exercise or non-exercise by a Party of any such rights shall not be construed as an endorsement or confirmation of any element or condition of the Interconnection Facilities or the System Protection Facilities or other protective equipment or the operation thereof, or as a warranty as to the fitness, safety, desirability, or reliability of same. Any information that a Party obtains through the exercise of any of its rights under this Article 6.4 shall be deemed to be Confidential Information and treated pursuant to Article 22 of this LGIA.

#### ARTICLE 7. METERING

- 7.1 General.** Each Party shall comply with any Applicable Reliability Standards and the Applicable Reliability Council requirements. The Interconnection Customer and CAISO shall comply with the provisions of the CAISO Tariff regarding metering, including Section 10 of the CAISO Tariff. Unless otherwise agreed by the Participating TO and the Interconnection Customer, the Participating TO may install additional Metering Equipment at the Point of Interconnection prior to any operation of any Electric Generating Unit and shall own, operate, test and maintain such Metering Equipment. Power flows to and from the Large Generating Facility shall be measured at or, at the CAISO's or Participating TO's option for its respective Metering Equipment, compensated to, the Point of Interconnection. The CAISO shall provide metering quantities to the Interconnection Customer upon request in accordance with the CAISO Tariff by directly polling the CAISO's meter data acquisition system. The Interconnection Customer shall bear all reasonable documented costs associated with the purchase, installation, operation, testing and maintenance of the Metering Equipment.
- 7.2 Check Meters.** The Interconnection Customer, at its option and expense, may install and operate, on its premises and on its side of the Point of Interconnection, one or more check meters to check the CAISO-pollled meters or the Participating TO's meters. Such check meters shall be for check purposes only and shall not be used for the measurement of power flows for purposes of this LGIA, except in the case that no other means are available on a temporary basis at the option of the CAISO or the Participating TO. The check meters shall be subject at all reasonable times to inspection and examination by the CAISO or Participating TO or their designees. The installation, operation and maintenance thereof shall be performed entirely by the Interconnection Customer in accordance with Good Utility Practice.
- 7.3 Participating TO Retail Metering.** The Participating TO may install retail revenue quality meters and associated equipment, pursuant to the Participating TO's applicable retail tariffs.

## ARTICLE 8. COMMUNICATIONS

- 8.1 Interconnection Customer Obligations.** The Interconnection Customer shall maintain satisfactory operating communications with the CAISO in accordance with the provisions of the CAISO Tariff and with the Participating TO's dispatcher or representative designated by the Participating TO. The Interconnection Customer shall provide standard voice line, dedicated voice line and facsimile communications at its Large Generating Facility control room or central dispatch facility through use of either the public telephone system, or a voice communications system that does not rely on the public telephone system. The Interconnection Customer shall also provide the dedicated data circuit(s) necessary to provide Interconnection Customer data to the CAISO and Participating TO as set forth in Appendix D, Security Arrangements Details. The data circuit(s) shall extend from the Large Generating Facility to the location(s) specified by the CAISO and Participating TO. Any required maintenance of such communications equipment shall be performed by the Interconnection Customer. Operational communications shall be activated and maintained under, but not be limited to, the following events: system paralleling or separation, scheduled and unscheduled shutdowns, equipment clearances, and hourly and daily load data.
- 8.2 Remote Terminal Unit.** Prior to the Initial Synchronization Date of each Electric Generating Unit, a Remote Terminal Unit, or equivalent data collection and transfer equipment acceptable to the Parties, shall be installed by the Interconnection Customer, or by the Participating TO at the Interconnection Customer's expense, to gather accumulated and instantaneous data to be telemetered to the location(s) designated by the CAISO and by the Participating TO through use of a dedicated point-to-point data circuit(s) as indicated in Article 8.1.
- Telemetry to the CAISO shall be provided in accordance with the CAISO's technical standards for direct telemetry. For telemetry to the Participating TO, the communication protocol for the data circuit(s) shall be specified by the Participating TO. Instantaneous bi-directional real power and reactive power flow and any other required information must be telemetered directly to the location(s) specified by the Participating TO.
- Each Party will promptly advise the other Parties if it detects or otherwise learns of any metering, telemetry or communications equipment errors or malfunctions that require the attention and/or correction by another Party. The Party owning such equipment shall correct such error or malfunction as soon as reasonably feasible.
- 8.3 No Annexation.** Any and all equipment placed on the premises of a Party shall be and remain the property of the Party providing such equipment regardless of the mode and manner of annexation or attachment to real property, unless otherwise mutually agreed by the Parties.

## ARTICLE 9. OPERATIONS

- 9.1 General.** Each Party shall comply with Applicable Reliability Standards and the Applicable Reliability Council requirements. Each Party shall provide to the other Party all information that may reasonably be required by the other Party to comply with Applicable Laws and Regulations and Applicable Reliability Standards.

- 9.2 Balancing Authority Area Notification.** At least three months before Initial Synchronization Date, the Interconnection Customer shall notify the CAISO and Participating TO in writing of the Balancing Authority Area in which the Large Generating Facility intends to be located. If the Interconnection Customer intends to locate the Large Generating Facility in a Balancing Authority Area other than the Balancing Authority Area within whose electrically metered boundaries the Large Generating Facility is located, and if permitted to do so by the relevant transmission tariffs, all necessary arrangements, including but not limited to those set forth in Article 7 and Article 8 of this LGIA, and remote Balancing Authority Area generator interchange agreements, if applicable, and the appropriate measures under such agreements, shall be executed and implemented prior to the placement of the Large Generating Facility in the other Balancing Authority Area.
- 9.3 CAISO and Participating TO Obligations.** The CAISO and Participating TO shall cause the Participating TO's Transmission System to be operated and controlled in a safe and reliable manner and in accordance with this LGIA. The Participating TO at the Interconnection Customer's expense shall cause the Participating TO's Interconnection Facilities to be operated, maintained and controlled in a safe and reliable manner and in accordance with this LGIA. The CAISO and Participating TO may provide operating instructions to the Interconnection Customer consistent with this LGIA and Participating TO and CAISO operating protocols and procedures as they may change from time to time. The Participating TO and CAISO will consider changes to their operating protocols and procedures proposed by the Interconnection Customer.
- 9.4 Interconnection Customer Obligations.** The Interconnection Customer shall at its own expense operate, maintain and control the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA. The Interconnection Customer shall operate the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in accordance with all applicable requirements of the Balancing Authority Area of which it is part, including such requirements as set forth in Appendix C, Interconnection Details, of this LGIA. Appendix C, Interconnection Details, will be modified to reflect changes to the requirements as they may change from time to time. A Party may request that another Party provide copies of the requirements set forth in Appendix C, Interconnection Details, of this LGIA. The Interconnection Customer shall not commence Commercial Operation of an Electric Generating Unit with the Participating TO's Transmission System until the Participating TO provides prior written approval, which approval shall not be unreasonably withheld, for operation of such Electric Generating Unit.
- 9.5 Start-Up and Synchronization.** Consistent with the Parties' mutually acceptable procedures, the Interconnection Customer is responsible for the proper synchronization of each Electric Generating Unit to the CAISO Controlled Grid.
- 9.6 Reactive Power.**
- 9.6.1 Power Factor Design Criteria.** The Interconnection Customer shall design the Large Generating Facility to maintain a composite power delivery at continuous rated power output at the terminals of the Electric Generating Unit at a power factor within the range of 0.95 leading to 0.90 lagging, unless the CAISO has established different requirements that apply to all generators in the Balancing Authority Area on a comparable basis. Power factor design criteria for wind generators are provided in Appendix H of this LGIA.

**9.6.2 Voltage Schedules.** Once the Interconnection Customer has synchronized an Electric Generating Unit with the CAISO Controlled Grid, the CAISO or Participating TO shall require the Interconnection Customer to maintain a voltage schedule by operating the Electric Generating Unit to produce or absorb reactive power within the design limitations of the Electric Generating Unit set forth in Article 9.6.1 (Power Factor Design Criteria). CAISO's voltage schedules shall treat all sources of reactive power in the Balancing Authority Area in an equitable and not unduly discriminatory manner. The Participating TO shall exercise Reasonable Efforts to provide the Interconnection Customer with such schedules at least one (1) day in advance, and the CAISO or Participating TO may make changes to such schedules as necessary to maintain the reliability of the CAISO Controlled Grid or the Participating TO's electric system. The Interconnection Customer shall operate the Electric Generating Unit to maintain the specified output voltage or power factor within the design limitations of the Electric Generating Unit set forth in Article 9.6.1 (Power Factor Design Criteria), and as may be required by the CAISO to operate the Electric Generating Unit at a specific voltage schedule within the design limitations set forth in Article 9.6.1. If the Interconnection Customer is unable to maintain the specified voltage or power factor, it shall promptly notify the CAISO and the Participating TO.

**9.6.2.1 Governors and Regulators.** Whenever an Electric Generating Unit is operated in parallel with the CAISO Controlled Grid and the speed governors (if installed on the Electric Generating Unit pursuant to Good Utility Practice) and voltage regulators are capable of operation, the Interconnection Customer shall operate the Electric Generating Unit with its speed governors and voltage regulators in automatic operation. If the Electric Generating Unit's speed governors and voltage regulators are not capable of such automatic operation, the Interconnection Customer shall immediately notify the CAISO and the Participating TO and ensure that the Electric Generating Unit operates as specified in Article 9.6.2 through manual operation and that such Electric Generating Unit's reactive power production or absorption (measured in MVARs) are within the design capability of the Electric Generating Unit(s) and steady state stability limits. The Interconnection Customer shall restore the speed governors and voltage regulators to automatic operation as soon as possible. If the Large Generating Facility's speed governors and voltage regulators are improperly tuned or malfunctioning, the CAISO shall have the right to order the reduction in output or disconnection of the Large Generating Facility if the reliability of the CAISO Controlled Grid would be adversely affected. The Interconnection Customer shall not cause its Large Generating Facility to disconnect automatically or instantaneously from the CAISO Controlled Grid or trip any Electric Generating Unit comprising the Large Generating Facility for an under or over frequency condition unless the abnormal frequency condition persists for a time period beyond the limits set forth in ANSI/IEEE Standard C37.106, or such other standard as applied to other generators in the Balancing Authority Area on a comparable basis.

**9.6.3 Payment for Reactive Power.** CAISO is required to pay the Interconnection Customer for reactive power that Interconnection Customer provides or absorbs from an Electric Generating Unit when the CAISO requests the Interconnection Customer to operate its Electric Generating Unit outside the range specified in Article 9.6.1, provided that if the CAISO pays other generators for reactive power service within the specified range, it must also pay the Interconnection Customer. Payments shall be pursuant to Article 11.6 or such other agreement to which the CAISO and Interconnection Customer have otherwise agreed.

**9.7 Outages and Interruptions.**

**9.7.1 Outages.**

**9.7.1.1 Outage Authority and Coordination.** Each Party may in accordance with Good Utility Practice in coordination with the other Parties remove from service any of its respective Interconnection Facilities or Network Upgrades that may impact another Party's facilities as necessary to perform maintenance or testing or to install or replace equipment. Absent an Emergency Condition, the Party scheduling a removal of such facility(ies) from service will use Reasonable Efforts to schedule such removal on a date and time mutually acceptable to all Parties. In all circumstances any Party planning to remove such facility(ies) from service shall use Reasonable Efforts to minimize the effect on the other Parties of such removal.

**9.7.1.2 Outage Schedules.** The CAISO shall post scheduled outages of CAISO Controlled Grid facilities in accordance with the provisions of the CAISO Tariff. The Interconnection Customer shall submit its planned maintenance schedules for the Large Generating Facility to the CAISO in accordance with the CAISO Tariff. The Interconnection Customer shall update its planned maintenance schedules in accordance with the CAISO Tariff. The CAISO may request the Interconnection Customer to reschedule its maintenance as necessary to maintain the reliability of the CAISO Controlled Grid in accordance with the CAISO Tariff. Such planned maintenance schedules and updates and changes to such schedules shall be provided by the Interconnection Customer to the Participating TO concurrently with their submittal to the CAISO. The CAISO shall compensate the Interconnection Customer for any additional direct costs that the Interconnection Customer incurs as a result of having to reschedule maintenance in accordance with the CAISO Tariff. The Interconnection Customer will not be eligible to receive compensation, if during the twelve (12) months prior to the date of the scheduled maintenance, the Interconnection Customer had modified its schedule of maintenance activities.



**9.7.1.3 Outage Restoration.** If an outage on a Party's Interconnection Facilities or Network Upgrades adversely affects another Party's operations or facilities, the Party that owns or controls the facility that is out of service shall use Reasonable Efforts to promptly restore such facility(ies) to a normal operating condition consistent with the nature of the outage. The Party that owns or controls the facility that is out of service shall provide the other Parties, to the extent such information is known, information on the nature of the Emergency Condition, if the outage is caused by an Emergency Condition, an estimated time of restoration, and any corrective actions required. Initial verbal notice shall be followed up as soon as practicable with written notice explaining the nature of the outage, if requested by a Party, which may be provided by e-mail or facsimile.

**9.7.2 Interruption of Service.** If required by Good Utility Practice to do so, the CAISO or the Participating TO may require the Interconnection Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect the CAISO's or the Participating TO's ability to perform such activities as are necessary to safely and reliably operate and maintain the Participating TO's electric system or the CAISO Controlled Grid. The following provisions shall apply to any interruption or reduction permitted under this Article 9.7.2:

**9.7.2.1** The interruption or reduction shall continue only for so long as reasonably necessary under Good Utility Practice;

**9.7.2.2** Any such interruption or reduction shall be made on an equitable, non-discriminatory basis with respect to all generating facilities directly connected to the CAISO Controlled Grid, subject to any conditions specified in this LGIA;

**9.7.2.3** When the interruption or reduction must be made under circumstances which do not allow for advance notice, the CAISO or Participating TO, as applicable, shall notify the Interconnection Customer by telephone as soon as practicable of the reasons for the curtailment, interruption, or reduction, and, if known, its expected duration. Telephone notification shall be followed by written notification, if requested by the Interconnection Customer, as soon as practicable;

**9.7.2.4** Except during the existence of an Emergency Condition, the CAISO or Participating TO shall notify the Interconnection Customer in advance regarding the timing of such interruption or reduction and further notify the Interconnection Customer of the expected duration. The CAISO or Participating TO shall coordinate with the Interconnection Customer using Good Utility Practice to schedule the interruption or reduction during periods of least impact to the Interconnection Customer, the CAISO, and the Participating TO;

**9.7.2.5** The Parties shall cooperate and coordinate with each other to the extent necessary in order to restore the Large Generating Facility, Interconnection Facilities, the Participating TO's Transmission System, and the CAISO Controlled Grid to their normal operating state, consistent with system conditions and Good Utility Practice.

**9.7.3 Under-Frequency and Over Frequency Conditions.** The CAISO Controlled Grid is designed to automatically activate a load-shed program as required by Applicable Reliability Standards and the Applicable Reliability Council in the event of an under-frequency system disturbance. The Interconnection Customer shall implement under-frequency and over-frequency protection set points for the Large Generating Facility as required by Applicable Reliability Standards and the Applicable Reliability Council to ensure "ride through" capability. Large Generating Facility response to frequency deviations of pre-determined magnitudes, both under-frequency and over-frequency deviations, shall be studied and coordinated with the Participating TO and CAISO in accordance with Good Utility Practice. The term "ride through" as used herein shall mean the ability of a Generating Facility to stay connected to and synchronized with the CAISO Controlled Grid during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice.

**9.7.4 System Protection and Other Control Requirements.**

**9.7.4.1 System Protection Facilities.** The Interconnection Customer shall, at its expense, install, operate and maintain System Protection Facilities as a part of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. The Participating TO shall install at the Interconnection Customer's expense any System Protection Facilities that may be required on the Participating TO's Interconnection Facilities or the Participating TO's Transmission System as a result of the interconnection of the Large Generating Facility and the Interconnection Customer's Interconnection Facilities.

**9.7.4.2** The Participating TO's and Interconnection Customer's protection facilities shall be designed and coordinated with other systems in accordance with Applicable Reliability Standards, Applicable Reliability Council criteria, and Good Utility Practice.

**9.7.4.3** The Participating TO and Interconnection Customer shall each be responsible for protection of its facilities consistent with Good Utility Practice.

**9.7.4.4** The Participating TO's and Interconnection Customer's protective relay design shall incorporate the necessary test switches to perform the tests required in Article 6. The required test switches will be placed such that they allow operation of lockout relays while preventing breaker failure schemes from operating and causing unnecessary breaker operations and/or the tripping of the Interconnection Customer's Electric Generating Units.

**9.7.4.5** The Participating TO and Interconnection Customer will test, operate and maintain System Protection Facilities in accordance with Good Utility Practice and, if applicable, the requirements of the Participating TO's Interconnection Handbook.

**9.7.4.6** Prior to the in-service date, and again prior to the Commercial Operation Date, the Participating TO and Interconnection Customer or their agents shall perform a complete calibration test and functional trip test of the System Protection Facilities. At intervals suggested by Good Utility Practice, the standards and procedures of the Participating TO, including, if applicable, the requirements of the Participating TO's Interconnection Handbook, and following any apparent malfunction of the System Protection Facilities, each Party shall perform both calibration and functional trip tests of its System Protection Facilities. These tests do not require the tripping of any in-service generation unit. These tests do, however, require that all protective relays and lockout contacts be activated.

**9.7.5 Requirements for Protection.** In compliance with Good Utility Practice and, if applicable, the requirements of the Participating TO's Interconnection Handbook, the Interconnection Customer shall provide, install, own, and maintain relays, circuit breakers and all other devices necessary to remove any fault contribution of the Large Generating Facility to any short circuit occurring on the Participating TO's Transmission System not otherwise isolated by the Participating TO's equipment, such that the removal of the fault contribution shall be coordinated with the protective requirements of the Participating TO's Transmission System. Such protective equipment shall include, without limitation, a disconnecting device with fault current-interrupting capability located between the Large Generating Facility and the Participating TO's Transmission System at a site selected upon mutual agreement (not to be unreasonably withheld, conditioned or delayed) of the Parties. The Interconnection Customer shall be responsible for protection of the Large Generating Facility and the Interconnection Customer's other equipment from such conditions as negative sequence currents, over- or under-frequency, sudden load rejection, over- or under-voltage, and generator loss-of-field. The Interconnection Customer shall be solely responsible to disconnect the Large Generating Facility and the Interconnection Customer's other equipment if conditions on the CAISO Controlled Grid could adversely affect the Large Generating Facility.

**9.7.6 Power Quality.** Neither the Participating TO's nor the Interconnection Customer's facilities shall cause excessive voltage flicker nor introduce excessive distortion to the sinusoidal voltage or current waves as defined by ANSI Standard C84.1-1989, in accordance with IEEE Standard 519, any applicable superseding electric industry standard, or any alternative Applicable Reliability Standard or Applicable Reliability Council standard. In the event of a conflict among ANSI Standard C84.1-1989, any applicable superseding electric industry standard, or any alternative Applicable Reliability Standard or Applicable Reliability Council standard, the alternative Applicable Reliability Standard or Applicable Reliability Council standard shall control.

**9.8 Switching and Tagging Rules.** Each Party shall provide the other Parties a copy of its switching and tagging rules that are applicable to the other Parties' activities. Such switching and tagging rules shall be developed on a non-discriminatory basis. The Parties shall comply with applicable switching and tagging rules, as amended from time to time, in obtaining clearances for work or for switching operations on equipment.

**9.9 Use of Interconnection Facilities by Third Parties.**

**9.9.1 Purpose of Interconnection Facilities.** Except as may be required by Applicable Laws and Regulations, or as otherwise agreed to among the Parties, the Interconnection Facilities shall be constructed for the sole purpose of interconnecting the Large Generating Facility to the Participating TO's Transmission System and shall be used for no other purpose.

**9.9.2 Third Party Users.** If required by Applicable Laws and Regulations or if the Parties mutually agree, such agreement not to be unreasonably withheld, to allow one or more third parties to use the Participating TO's Interconnection Facilities, or any part thereof, the Interconnection Customer will be entitled to compensation for the capital expenses it incurred in connection with the Interconnection Facilities based upon the pro rata use of the Interconnection Facilities by the Participating TO, all third party users, and the Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually-agreed upon methodology. In addition, cost responsibility for ongoing costs, including operation and maintenance costs associated with the Interconnection Facilities, will be allocated between the Interconnection Customer and any third party users based upon the pro rata use of the Interconnection Facilities by the Participating TO, all third party users, and the Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually agreed upon methodology. If the issue of such compensation or allocation cannot be resolved through such negotiations, it shall be submitted to FERC for resolution.

**9.10 Disturbance Analysis Data Exchange.** The Parties will cooperate with one another in the analysis of disturbances to either the Large Generating Facility or the CAISO Controlled Grid by gathering and providing access to any information relating to any disturbance, including information from oscillography, protective relay targets, breaker operations and sequence of events records, and any disturbance information required by Good Utility Practice.

**ARTICLE 10. MAINTENANCE**

**10.1 Participating TO Obligations.** The Participating TO shall maintain the Participating TO's Transmission System and the Participating TO's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA.

**10.2 Interconnection Customer Obligations.** The Interconnection Customer shall maintain the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA.

**10.3 Coordination.** The Parties shall confer regularly to coordinate the planning, scheduling and performance of preventive and corrective maintenance on the Large Generating Facility and the Interconnection Facilities.

- 10.4 Secondary Systems.** The Participating TO and Interconnection Customer shall cooperate with the other Parties in the inspection, maintenance, and testing of control or power circuits that operate below 600 volts, AC or DC, including, but not limited to, any hardware, control or protective devices, cables, conductors, electric raceways, secondary equipment panels, transducers, batteries, chargers, and voltage and current transformers that directly affect the operation of a Party's facilities and equipment which may reasonably be expected to impact the other Parties. Each Party shall provide advance notice to the other Parties before undertaking any work on such circuits, especially on electrical circuits involving circuit breaker trip and close contacts, current transformers, or potential transformers.
- 10.5 Operating and Maintenance Expenses.** Subject to the provisions herein addressing the use of facilities by others, and except for operations and maintenance expenses associated with modifications made for providing interconnection or transmission service to a third party and such third party pays for such expenses, the Interconnection Customer shall be responsible for all reasonable expenses including overheads, associated with: (1) owning, operating, maintaining, repairing, and replacing the Interconnection Customer's Interconnection Facilities; and (2) operation, maintenance, repair and replacement of the Participating TO's Interconnection Facilities.

#### ARTICLE 11. PERFORMANCE OBLIGATION

- 11.1 Interconnection Customer's Interconnection Facilities.** The Interconnection Customer shall design, procure, construct, install, own and/or control the Interconnection Customer's Interconnection Facilities described in Appendix A at its sole expense.
- 11.2 Participating TO's Interconnection Facilities.** The Participating TO shall design, procure, construct, install, own and/or control the Participating TO's Interconnection Facilities described in Appendix A at the sole expense of the Interconnection Customer. Unless the Participating TO elects to fund the capital for the Participating TO's Interconnection Facilities, they shall be solely funded by the Interconnection Customer.
- 11.3 Network Upgrades and Distribution Upgrades.** The Participating TO shall design, procure, construct, install, and own the Network Upgrades and Distribution Upgrades described in Appendix A. The Interconnection Customer shall be responsible for all costs related to Distribution Upgrades. Unless the Participating TO elects to fund the capital for the Distribution Upgrades and Network Upgrades, they shall be funded by the Interconnection Customer in an amount determined pursuant to the methodology set forth in Section 13 of the LGIP. This specific amount is set forth in Appendix G to this LGIA.
- 11.4 Transmission Credits.** No later than thirty (30) Calendar Days prior to the Commercial Operation Date, the Interconnection Customer may make a one-time election by written notice to the CAISO and the Participating TO to receive Congestion Revenue Rights as defined in and as available under the CAISO Tariff at the time of the election in accordance with the CAISO Tariff, in lieu of a refund of the cost of Network Upgrades in accordance with Article 11.4.1.

**11.4.1 Repayment of Amounts Advanced for Network Upgrades.** Upon the Commercial Operation Date, the Interconnection Customer shall be entitled to a repayment, equal to the total amount paid to the Participating TO for the costs of Network Upgrades for which it is responsible, as set forth in Appendix G. Such amount shall include any tax gross-up or other tax-related payments associated with Network Upgrades not refunded to the Interconnection Customer pursuant to Article 5.17.8 or otherwise, and shall be paid to the Interconnection Customer by the Participating TO on a dollar-for-dollar basis either through (1) direct payments made on a levelized basis over the five-year period commencing on the Commercial Operation Date; or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years from the Commercial Operation Date. Notwithstanding the foregoing, if this LGIA terminates within five (5) years from the Commercial Operation Date, the Participating TO's obligation to pay refunds to the Interconnection Customer shall cease as of the date of termination. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment. Interest shall continue to accrue on the repayment obligation so long as this LGIA is in effect. The Interconnection Customer may assign such repayment rights to any person.

If the Large Generating Facility fails to achieve Commercial Operation, but it or another Generating Facility is later constructed and makes use of the Network Upgrades, the Participating TO shall at that time reimburse Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the Generating Facility, if different, is responsible for identifying and demonstrating to the Participating TO the appropriate entity to which reimbursement must be made in order to implement the intent of this reimbursement obligation.

**11.4.2 Special Provisions for Affected Systems.** The Interconnection Customer shall enter into an agreement with the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid, as applicable, in accordance with the LGIP. Such agreement shall specify the terms governing payments to be made by the Interconnection Customer to the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid as well as the repayment by the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid. In no event shall the Participating TO be responsible for the repayment for any facilities that are not part of the Participating TO's Transmission System. In the event the Participating TO is a joint owner with an Affected System or with any other co-owner of a facility affected by the Large Generating Facility, the Participating TO's obligation to reimburse the Interconnection Customer for payments made to address the impacts of the Large Generating Facility on the system shall not exceed the proportionate amount of the cost of any upgrades attributable to the proportion of the jointly-owned facility owned by the Participating TO.

- 11.4.3** Notwithstanding any other provision of this LGIA, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, Congestion Revenue Rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements, merchant transmission Congestion Revenue Rights in accordance with Section 36.11 of the CAISO Tariff, or transmission credits for transmission service that is not associated with the Large Generating Facility.
- 11.5 Provision of Interconnection Financial Security.** The Interconnection Customer is obligated to provide all necessary Interconnection Financial Security required under Section 9 of the LGIP in a manner acceptable under Section 9 of the LGIP. Failure to satisfy the LGIP's requirements for the provision of Interconnection Financial Security shall result in the Interconnection Request being deemed withdrawn and subject to LGIP Section 3.8.
- 11.6 Interconnection Customer Compensation.** If the CAISO requests or directs the Interconnection Customer to provide a service pursuant to Articles 9.6.3 (Payment for Reactive Power) or 13.5.1 of this LGIA, the CAISO shall compensate the Interconnection Customer in accordance with the CAISO Tariff.
- 11.6.1 Interconnection Customer Compensation for Actions During Emergency Condition.** The CAISO shall compensate the Interconnection Customer in accordance with the CAISO Tariff for its provision of real and reactive power and other Emergency Condition services that the Interconnection Customer provides to support the CAISO Controlled Grid during an Emergency Condition in accordance with Article 11.6.

## ARTICLE 12. INVOICE

- 12.1 General.** The Participating TO shall submit to the Interconnection Customer, on a monthly basis, invoices of amounts due pursuant to this LGIA for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party under this LGIA, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party. Notwithstanding the foregoing, any invoices between the CAISO and another Party shall be submitted and paid in accordance with the CAISO Tariff.

- 12.2 Final Invoice.** As soon as reasonably practicable, but within twelve months after completion of the construction of the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, the Participating TO shall provide an invoice of the final cost of the construction of the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, and shall set forth such costs in sufficient detail to enable the Interconnection Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates. With respect to costs associated with the Participating TO's Interconnection Facilities and Distribution Upgrades, the Participating TO shall refund to the Interconnection Customer any amount by which the actual payment by the Interconnection Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice; or, in the event the actual costs of construction exceed the Interconnection Customer's actual payment for estimated costs, then the Interconnection Customer shall pay to the Participating TO any amount by which the actual costs of construction exceed the actual payment by the Interconnection Customer for estimated costs within thirty (30) Calendar Days of the issuance of such final construction invoice. With respect to costs associated with Network Upgrades, the Participating TO shall refund to the Interconnection Customer any amount by which the actual payment by the Interconnection Customer for estimated costs exceeds the actual costs of construction multiplied by the Interconnection Customer's percentage share of those costs, as set forth in Appendix G to this LGIA within thirty (30) Calendar Days of the issuance of such final construction invoice. In the event the actual costs of construction multiplied by the Interconnection Customer's percentage share of those costs exceed the Interconnection Customer's actual payment for estimated costs, then the Participating TO shall recover such difference through its transmission service rates.
- 12.3 Payment.** Invoices shall be rendered to the Interconnection Customer at the address specified in Appendix F. The Interconnection Customer shall pay, or Participating TO shall refund, the amounts due within thirty (30) Calendar Days of the Interconnection Customer's receipt of the invoice. All payments shall be made in immediately available funds payable to the Interconnection Customer or Participating TO, or by wire transfer to a bank named and account designated by the invoicing Interconnection Customer or Participating TO. Payment of invoices by any Party will not constitute a waiver of any rights or claims any Party may have under this LGIA.
- 12.4 Disputes.** In the event of a billing dispute between the Interconnection Customer and the Participating TO, the Participating TO and the CAISO shall continue to provide Interconnection Service under this LGIA as long as the Interconnection Customer: (i) continues to make all payments not in dispute; and (ii) pays to the Participating TO or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If the Interconnection Customer fails to meet these two requirements for continuation of service, then the Participating TO may provide notice to the Interconnection Customer of a Default pursuant to Article 17. Within thirty (30) Calendar Days after the resolution of the dispute, the Party that owes money to the other Party shall pay the amount due with interest calculated in accordance with the methodology set forth in FERC's Regulations at 18 C.F.R. § 35.19a(a)(2)(iii). Notwithstanding the foregoing, any billing dispute between the CAISO and another Party shall be resolved in accordance with the provisions of Article 27 of this LGIA.



**ARTICLE 13. EMERGENCIES**

**13.1 [Reserved]**

**13.2 Obligations.** Each Party shall comply with the Emergency Condition procedures of the CAISO, NERC, the Applicable Reliability Council, Applicable Reliability Standards, Applicable Laws and Regulations, and any emergency procedures set forth in this LGIA.

**13.3 Notice.** The Participating TO or the CAISO shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that affects the Participating TO's Interconnection Facilities or Distribution System or the CAISO Controlled Grid, respectively, that may reasonably be expected to affect the Interconnection Customer's operation of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. The Interconnection Customer shall notify the Participating TO and the CAISO promptly when it becomes aware of an Emergency Condition that affects the Large Generating Facility or the Interconnection Customer's Interconnection Facilities that may reasonably be expected to affect the CAISO Controlled Grid or the Participating TO's Interconnection Facilities. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of the Interconnection Customer's or Participating TO's facilities and operations, its anticipated duration and the corrective action taken and/or to be taken. The initial notice shall be followed as soon as practicable with written notice, if requested by a Party, which may be provided by electronic mail or facsimile, or in the case of the CAISO may be publicly posted on the CAISO's internet web site.

**13.4 Immediate Action.** Unless, in the Interconnection Customer's reasonable judgment, immediate action is required, the Interconnection Customer shall obtain the consent of the CAISO and the Participating TO, such consent to not be unreasonably withheld, prior to performing any manual switching operations at the Large Generating Facility or the Interconnection Customer's Interconnection Facilities in response to an Emergency Condition declared by the Participating TO or CAISO or in response to any other emergency condition.

**13.5 CAISO and Participating TO Authority.**

**13.5.1 General.** The CAISO and Participating TO may take whatever actions or inactions, including issuance of dispatch instructions, with regard to the CAISO Controlled Grid or the Participating TO's Interconnection Facilities or Distribution System they deem necessary during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the CAISO Controlled Grid or the Participating TO's Interconnection Facilities or Distribution System, and (iii) limit or prevent damage, and (iv) expedite restoration of service.

The Participating TO and the CAISO shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. The Participating TO or the CAISO may, on the basis of technical considerations, require the Large Generating Facility to mitigate an Emergency Condition by taking actions necessary and limited in scope to remedy the Emergency Condition, including, but not limited to, directing the Interconnection Customer to shut-down, start-up, increase or decrease the real or reactive power output of the Large Generating Facility; implementing a reduction or disconnection pursuant to Article 13.5.2; directing the Interconnection Customer to assist with black start (if available) or restoration efforts; or altering the outage schedules of the Large Generating Facility and the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall comply with all of the CAISO's and Participating TO's operating instructions concerning Large Generating Facility real power and reactive power output within the manufacturer's design limitations of the Large Generating Facility's equipment that is in service and physically available for operation at the time, in compliance with Applicable Laws and Regulations.

**13.5.2 Reduction and Disconnection.** The Participating TO or the CAISO may reduce Interconnection Service or disconnect the Large Generating Facility or the Interconnection Customer's Interconnection Facilities when such reduction or disconnection is necessary under Good Utility Practice due to Emergency Conditions. These rights are separate and distinct from any right of curtailment of the CAISO pursuant to the CAISO Tariff. When the CAISO or Participating TO can schedule the reduction or disconnection in advance, the CAISO or Participating TO shall notify the Interconnection Customer of the reasons, timing and expected duration of the reduction or disconnection. The CAISO or Participating TO shall coordinate with the Interconnection Customer using Good Utility Practice to schedule the reduction or disconnection during periods of least impact to the Interconnection Customer and the CAISO and Participating TO. Any reduction or disconnection shall continue only for so long as reasonably necessary under Good Utility Practice. The Parties shall cooperate with each other to restore the Large Generating Facility, the Interconnection Facilities, and the CAISO Controlled Grid to their normal operating state as soon as practicable consistent with Good Utility Practice.

**13.6 Interconnection Customer Authority.** Consistent with Good Utility Practice, this LGIA, and the CAISO Tariff, the Interconnection Customer may take actions or inactions with regard to the Large Generating Facility or the Interconnection Customer's Interconnection Facilities during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service. Interconnection Customer shall use Reasonable Efforts to minimize the effect of such actions or inactions on the CAISO Controlled Grid and the Participating TO's Interconnection Facilities. The CAISO and Participating TO shall use Reasonable Efforts to assist Interconnection Customer in such actions.

**13.7 Limited Liability.** Except as otherwise provided in Article 11.6.1 of this LGIA, no Party shall be liable to any other Party for any action it takes in responding to an Emergency Condition so long as such action is made in good faith and is consistent with Good Utility Practice.

#### ARTICLE 14. REGULATORY REQUIREMENTS AND GOVERNING LAW

- 14.1 Regulatory Requirements.** Each Party's obligations under this LGIA shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the applying Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek and use its Reasonable Efforts to obtain such other approvals. Nothing in this LGIA shall require the Interconnection Customer to take any action that could result in its inability to obtain, or its loss of, status or exemption under the Federal Power Act or the Public Utility Holding Company Act of 1935, as amended, or the Public Utility Regulatory Policies Act of 1978, or the Energy Policy Act of 2005.
- 14.2 Governing Law.**
- 14.2.1** The validity, interpretation and performance of this LGIA and each of its provisions shall be governed by the laws of the state where the Point of Interconnection is located, without regard to its conflicts of law principles.
- 14.2.2** This LGIA is subject to all Applicable Laws and Regulations.
- 14.2.3** Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, rules, or regulations of a Governmental Authority.

#### ARTICLE 15. NOTICES

- 15.1 General.** Unless otherwise provided in this LGIA, any notice, demand or request required or permitted to be given by a Party to another and any instrument required or permitted to be tendered or delivered by a Party in writing to another shall be effective when delivered and may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered mail, addressed to the Party, or personally delivered to the Party, at the address set out in Appendix F, Addresses for Delivery of Notices and Billings.
- A Party must update the information in Appendix F as information changes. A Party may change the notice information in this LGIA by giving five (5) Business Days written notice prior to the effective date of the change. Such changes shall not constitute an amendment to this LGIA.
- 15.2 Billings and Payments.** Billings and payments shall be sent to the addresses set out in Appendix F.
- 15.3 Alternative Forms of Notice.** Any notice or request required or permitted to be given by a Party to another and not required by this LGIA to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out in Appendix F.
- 15.4 Operations and Maintenance Notice.** Each Party shall notify the other Parties in writing of the identity of the person(s) that it designates as the point(s) of contact with respect to the implementation of Articles 9 and 10.

## ARTICLE 16. FORCE MAJEURE

### 16.1 Force Majeure.

16.1.1 Economic hardship is not considered a Force Majeure event.

16.1.2 No Party shall be considered to be in Default with respect to any obligation hereunder, (including obligations under Article 4), other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other Party in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this Article shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall exercise due diligence to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

## ARTICLE 17. DEFAULT

### 17.1 Default.

17.1.1 **General.** No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this LGIA or the result of an act or omission of the other Party. Upon a Breach, the affected non-Breaching Party(ies) shall give written notice of such Breach to the Breaching Party. Except as provided in Article 17.1.2, the Breaching Party shall have thirty (30) Calendar Days from receipt of the Default notice within which to cure such Breach; provided however, if such Breach is not capable of cure within thirty (30) Calendar Days, the Breaching Party shall commence such cure within thirty (30) Calendar Days after notice and continuously and diligently complete such cure within ninety (90) Calendar Days from receipt of the Default notice; and, if cured within such time, the Breach specified in such notice shall cease to exist.

17.1.2 **Right to Terminate.** If a Breach is not cured as provided in this Article, or if a Breach is not capable of being cured within the period provided for herein, the affected non-Breaching Party(ies) shall have the right to declare a Default and terminate this LGIA by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not such Party(ies) terminates this LGIA, to recover from the Breaching Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this Article will survive termination of this LGIA.

**ARTICLE 18. INDEMNITY, CONSEQUENTIAL DAMAGES AND INSURANCE**

**18.1 Indemnity.** Each Party shall at all times indemnify, defend, and hold the other Parties harmless from, any and all Losses arising out of or resulting from another Party's action or inactions of its obligations under this LGIA on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the Indemnified Party.

**18.1.1 Indemnified Party.** If an Indemnified Party is entitled to indemnification under this Article 18 as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 18.1, to assume the defense of such claim, such Indemnified Party may at the expense of the Indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

**18.1.2 Indemnifying Party.** If an Indemnifying Party is obligated to indemnify and hold any Indemnified Party harmless under this Article 18, the amount owing to the Indemnified Party shall be the amount of such Indemnified Party's actual Loss, net of any insurance or other recovery.

**18.1.3 Indemnity Procedures.** Promptly after receipt by an Indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 18.1 may apply, the Indemnified Party shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Party. If the defendants in any such action include one or more Indemnified Parties and the Indemnifying Party and if the Indemnified Party reasonably concludes that there may be legal defenses available to it and/or other Indemnified Parties which are different from or additional to those available to the Indemnifying Party, the Indemnified Party shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Party or Indemnified Parties having such differing or additional legal defenses.

The Indemnified Party shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Party and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Party, or there exists a conflict or adversity of interest between the Indemnified Party and the Indemnifying Party, in such event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Party, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Party, which shall not be unreasonably withheld, conditioned or delayed.

**18.2 Consequential Damages.** Other than the liquidated damages heretofore described in Article 5.3, in no event shall any Party be liable under any provision of this LGIA for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to another Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

**18.3 Insurance.** Each Party shall, at its own expense, maintain in force throughout the period of this LGIA, and until released by the other Parties, the following minimum insurance coverages, with insurers rated no less than A- (with a minimum size rating of VII) by Bests' Insurance Guide and Key Ratings and authorized to do business in the state where the Point of Interconnection is located, except in the case of the CAISO, the State of California:

**18.3.1** Employer's Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located, except in the case of the CAISO, the State of California.

**18.3.2** Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate combined single limit for personal injury, bodily injury, including death and property damage.

**18.3.3** Business Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage.

**18.3.4** Excess Public Liability Insurance over and above the Employer's Liability Commercial General Liability and Business Automobile Liability Insurance coverage, with a minimum combined single limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.

**18.3.5** The Commercial General Liability Insurance, Business Automobile Insurance and Excess Public Liability Insurance policies shall name the other Parties, their parents, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this LGIA against the Other Party Group and provide thirty (30) Calendar Days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition.

- 18.3.6** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Public Liability Insurance policies shall contain provisions that specify that the policies are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Party shall be responsible for its respective deductibles or retentions.
- 18.3.7** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Public Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this LGIA, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed by the Parties.
- 18.3.8** The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this LGIA.
- 18.3.9** Within ten (10) Calendar Days following execution of this LGIA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) Calendar Days thereafter, each Party shall provide certification of all insurance required in this LGIA, executed by each insurer or by an authorized representative of each insurer.
- 18.3.10** Notwithstanding the foregoing, each Party may self-insure to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program; provided that, such Party's senior unsecured debt or issuer rating is BBB-, or better, as rated by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior unsecured debt rating and issuer rating are both unrated by Standard & Poor's or are both rated at less than BBB- by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9. In the event that a Party is permitted to self-insure pursuant to this Article 18.3.10, it shall notify the other Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.
- 18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this LGIA.

#### ARTICLE 19. ASSIGNMENT

- 19.1 Assignment.** This LGIA may be assigned by a Party only with the written consent of the other Parties; provided that a Party may assign this LGIA without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this LGIA; and provided further that the Interconnection Customer shall have the right to assign this LGIA, without the consent of the CAISO or Participating TO, for collateral security purposes to aid in providing financing for the Large Generating Facility, provided that the Interconnection Customer will promptly notify the CAISO and Participating TO of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the CAISO and Participating TO of the date and particulars of any such exercise of assignment right(s), including providing the CAISO and Participating TO with proof that it meets the requirements of Articles 11.5 and 18.3. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this LGIA shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

#### ARTICLE 20. SEVERABILITY

- 20.1 Severability.** If any provision in this LGIA is finally determined to be invalid, void or unenforceable by any court or other Governmental Authority having jurisdiction, such determination shall not invalidate, void or make unenforceable any other provision, agreement or covenant of this LGIA; provided that if the Interconnection Customer (or any third party, but only if such third party is not acting at the direction of the Participating TO or CAISO) seeks and obtains such a final determination with respect to any provision of the Alternate Option (Article 5.1.2), or the Negotiated Option (Article 5.1.4), then none of the provisions of Article 5.1.2 or 5.1.4 shall thereafter have any force or effect and the Parties' rights and obligations shall be governed solely by the Standard Option (Article 5.1.1).

#### ARTICLE 21. COMPARABILITY

- 21.1 Comparability.** The Parties will comply with all applicable comparability and code of conduct laws, rules and regulations, as amended from time to time.

#### ARTICLE 22. CONFIDENTIALITY

- 22.1 Confidentiality.** Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by any of the Parties to the other Parties prior to the execution of this LGIA.



Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Parties receiving the information that the information is confidential.

If requested by any Party, the other Parties shall provide in writing, the basis for asserting that the information referred to in this Article 22 warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

**22.1.1 Term.** During the term of this LGIA, and for a period of three (3) years after the expiration or termination of this LGIA, except as otherwise provided in this Article 22, each Party shall hold in confidence and shall not disclose to any person Confidential Information.

**22.1.2 Scope.** Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of this LGIA; or (6) is required, in accordance with Article 22.1.7 of this LGIA, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this LGIA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

**22.1.3 Release of Confidential Information.** No Party shall release or disclose Confidential Information to any other person, except to its employees, consultants, Affiliates (limited by the Standards of Conduct requirements set forth in Part 358 of FERC's Regulations, 18 C.F.R. 358), subcontractors, or to parties who may be or considering providing financing to or equity participation with the Interconnection Customer, or to potential purchasers or assignees of the Interconnection Customer, on a need-to-know basis in connection with this LGIA, unless such person has first been advised of the confidentiality provisions of this Article 22 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 22.

**22.1.4 Rights.** Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Parties. The disclosure by each Party to the other Parties of Confidential Information shall not be deemed a waiver by a Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

- 22.1.5 No Warranties.** The mere fact that a Party has provided Confidential Information does not constitute a warranty or representation as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to the other Parties nor to enter into any further agreements or proceed with any other relationship or joint venture.
- 22.1.6 Standard of Care.** Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under this LGIA or its regulatory requirements.
- 22.1.7 Order of Disclosure.** If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Parties with prompt notice of such request(s) or requirement(s) so that the other Parties may seek an appropriate protective order or waive compliance with the terms of this LGIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.
- 22.1.8 Termination of Agreement.** Upon termination of this LGIA for any reason, each Party shall, within ten (10) Calendar Days of receipt of a written request from another Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the other Party) or return to the other Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the other Party.
- 22.1.9 Remedies.** The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this Article 22. Each Party accordingly agrees that the other Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Article 22, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 22, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 22.

**22.1.10 Disclosure to FERC, its Staff, or a State.** Notwithstanding anything in this Article 22 to the contrary, and pursuant to 18 C.F.R. section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this LGIA, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. section 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this LGIA prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other Parties to the LGIA when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

**22.1.11** Subject to the exception in Article 22.1.10, Confidential Information shall not be disclosed by the other Parties to any person not employed or retained by the other Parties, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Parties, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this LGIA or as a transmission service provider or a Balancing Authority including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. The Party asserting confidentiality shall notify the other Parties in writing of the information it claims is confidential. Prior to any disclosures of another Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

## **ARTICLE 23. ENVIRONMENTAL RELEASES**

**23.1** Each Party shall notify the other Parties, first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Large Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Parties. The notifying Party shall: (i) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than twenty-four hours after such Party becomes aware of the occurrence; and (ii) promptly furnish to the other Parties copies of any publicly available reports filed with any Governmental Authorities addressing such events.

## ARTICLE 24. INFORMATION REQUIREMENTS

- 24.1 Information Acquisition.** The Participating TO and the Interconnection Customer shall submit specific information regarding the electrical characteristics of their respective facilities to each other as described below and in accordance with Applicable Reliability Standards.
- 24.2 Information Submission by Participating TO.** The initial information submission by the Participating TO shall occur no later than one hundred eighty (180) Calendar Days prior to Trial Operation and shall include the Participating TO's Transmission System information necessary to allow the Interconnection Customer to select equipment and meet any system protection and stability requirements, unless otherwise agreed to by the Participating TO and the Interconnection Customer. On a monthly basis the Participating TO shall provide the Interconnection Customer and the CAISO a status report on the construction and installation of the Participating TO's Interconnection Facilities and Network Upgrades, including, but not limited to, the following information: (1) progress to date; (2) a description of the activities since the last report; (3) a description of the action items for the next period; and (4) the delivery status of equipment ordered.
- 24.3 Updated Information Submission by Interconnection Customer.** The updated information submission by the Interconnection Customer, including manufacturer information, shall occur no later than one hundred eighty (180) Calendar Days prior to the Trial Operation. The Interconnection Customer shall submit a completed copy of the Electric Generating Unit data requirements contained in Appendix 1 to the LGIP. It shall also include any additional information provided to the Participating TO and the CAISO for the Interconnection Studies. Information in this submission shall be the most current Electric Generating Unit design or expected performance data. Information submitted for stability models shall be compatible with the Participating TO and CAISO standard models. If there is no compatible model, the Interconnection Customer will work with a consultant mutually agreed to by the Parties to develop and supply a standard model and associated information.
- If the Interconnection Customer's data is materially different from what was originally provided to the Participating TO and the CAISO for the Interconnection Studies, then the Participating TO and the CAISO will conduct appropriate studies pursuant to the LGIP to determine the impact on the Participating TO's Transmission System and affected portions of the CAISO Controlled Grid based on the actual data submitted pursuant to this Article 24.3. The Interconnection Customer shall not begin Trial Operation until such studies are completed and all other requirements of this LGIA are satisfied.
- 24.4 Information Supplementation.** Prior to the Trial Operation date, the Parties shall supplement their information submissions described above in this Article 24 with any and all "as-built" Electric Generating Unit information or "as-tested" performance information that differs from the initial submissions or, alternatively, written confirmation that no such differences exist. The Interconnection Customer shall conduct tests on the Electric Generating Unit as required by Good Utility Practice such as an open circuit "step voltage" test on the Electric Generating Unit to verify proper operation of the Electric Generating Unit's automatic voltage regulator.

Unless otherwise agreed, the test conditions shall include: (1) Electric Generating Unit at synchronous speed; (2) automatic voltage regulator on and in voltage control mode; and (3) a five percent (5 percent) change in Electric Generating Unit terminal voltage initiated by a change in the voltage regulators reference voltage. The Interconnection Customer shall provide validated test recordings showing the responses of Electric Generating Unit terminal and field voltages. In the event that direct recordings of these voltages is impractical, recordings of other voltages or currents that mirror the response of the Electric Generating Unit's terminal or field voltage are acceptable if information necessary to translate these alternate quantities to actual Electric Generating Unit terminal or field voltages is provided. Electric Generating Unit testing shall be conducted and results provided to the Participating TO and the CAISO for each individual Electric Generating Unit in a station.

Subsequent to the Commercial Operation Date, the Interconnection Customer shall provide the Participating TO and the CAISO any information changes due to equipment replacement, repair, or adjustment. The Participating TO shall provide the Interconnection Customer any information changes due to equipment replacement, repair or adjustment in the directly connected substation or any adjacent Participating TO-owned substation that may affect the Interconnection Customer's Interconnection Facilities equipment ratings, protection or operating requirements. The Parties shall provide such information pursuant to Article 5.19.

#### **ARTICLE 25. INFORMATION ACCESS AND AUDIT RIGHTS**

- 25.1 Information Access.** Each Party (the "disclosing Party") shall make available to the other Party information that is in the possession of the disclosing Party and is necessary in order for the other Party to: (i) verify the costs incurred by the disclosing Party for which the other Party is responsible under this LGIA; and (ii) carry out its obligations and responsibilities under this LGIA. The Parties shall not use such information for purposes other than those set forth in this Article 25.1 and to enforce their rights under this LGIA. Nothing in this Article 25 shall obligate the CAISO to make available to a Party any third party information in its possession or control if making such third party information available would violate a CAISO Tariff restriction on the use or disclosure of such third party information.
- 25.2 Reporting of Non-Force Majeure Events.** Each Party (the "notifying Party") shall notify the other Parties when the notifying Party becomes aware of its inability to comply with the provisions of this LGIA for a reason other than a Force Majeure event. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this Article shall not entitle the Party receiving such notification to allege a cause for anticipatory breach of this LGIA.
- 25.3 Audit Rights.** Subject to the requirements of confidentiality under Article 22 of this LGIA, the Parties' audit rights shall include audits of a Party's costs pertaining to such Party's performance or satisfaction of obligations owed to the other Party under this LGIA, calculation of invoiced amounts, the CAISO's efforts to allocate responsibility for the provision of reactive support to the CAISO Controlled Grid, the CAISO's efforts to allocate responsibility for interruption or reduction of generation on the CAISO Controlled Grid, and each such Party's actions in an Emergency Condition.

**25.3.1** The Interconnection Customer and the Participating TO shall each have the right, during normal business hours, and upon prior reasonable notice to the other Party, to audit at its own expense the other Party's accounts and records pertaining to either such Party's performance or either such Party's satisfaction of obligations owed to the other Party under this LGIA. Subject to Article 25.3.2, any audit authorized by this Article shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to each such Party's performance and satisfaction of obligations under this LGIA. Each such Party shall keep such accounts and records for a period equivalent to the audit rights periods described in Article 25.4.

**25.3.2** Notwithstanding anything to the contrary in Article 25.3, each Party's rights to audit the CAISO's accounts and records shall be as set forth in Section 22.1 of the CAISO Tariff.

**25.4 Audit Rights Periods.**

**25.4.1 Audit Rights Period for Construction-Related Accounts and Records.** Accounts and records related to the design, engineering, procurement, and construction of Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades constructed by the Participating TO shall be subject to audit for a period of twenty-four months following the Participating TO's issuance of a final invoice in accordance with Article 12.2. Accounts and records related to the design, engineering, procurement, and construction of Participating TO's Interconnection Facilities and/or Stand Alone Network Upgrades constructed by the Interconnection Customer shall be subject to audit and verification by the Participating TO and the CAISO for a period of twenty-four months following the Interconnection Customer's issuance of a final invoice in accordance with Article 5.2(8).

**25.4.2 Audit Rights Period for All Other Accounts and Records.** Accounts and records related to a Party's performance or satisfaction of all obligations under this LGIA other than those described in Article 25.4.1 shall be subject to audit as follows: (i) for an audit relating to cost obligations, the applicable audit rights period shall be twenty-four months after the auditing Party's receipt of an invoice giving rise to such cost obligations; and (ii) for an audit relating to all other obligations, the applicable audit rights period shall be twenty-four months after the event for which the audit is sought; provided that each Party's rights to audit the CAISO's accounts and records shall be as set forth in Section 22.1 of the CAISO Tariff.

**25.5 Audit Results.** If an audit by the Interconnection Customer or the Participating TO determines that an overpayment or an underpayment has occurred with respect to the other Party, a notice of such overpayment or underpayment shall be given to the other Party together with those records from the audit which supports such determination. The Party that is owed payment shall render an invoice to the other Party and such invoice shall be paid pursuant to Article 12 hereof.

**25.5.1** Notwithstanding anything to the contrary in Article 25.5, the Interconnection Customer's and Participating TO's rights to audit the CAISO's accounts and records shall be as set forth in Section 22.1 of the CAISO Tariff, and the CAISO's process for remedying an overpayment or underpayment shall be as set forth in the CAISO Tariff.

## ARTICLE 26. SUBCONTRACTORS

- 26.1 General.** Nothing in this LGIA shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this LGIA; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this LGIA in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.
- 26.2 Responsibility of Principal.** The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this LGIA. The hiring Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the CAISO or Participating TO be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under Article 5 of this LGIA. Any applicable obligation imposed by this LGIA upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.
- 26.3 No Limitation by Insurance.** The obligations under this Article 26 will not be limited in any way by any limitation of subcontractor's insurance.

## ARTICLE 27. DISPUTES

All disputes arising out of or in connection with this LGIA whereby relief is sought by or from the CAISO shall be settled in accordance with the provisions of Article 13 of the CAISO Tariff, except that references to the CAISO Tariff in such Article 13 of the CAISO Tariff shall be read as references to this LGIA. Disputes arising out of or in connection with this LGIA not subject to provisions of Article 13 of the CAISO Tariff shall be resolved as follows:

- 27.1 Submission.** In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with this LGIA or its performance, such Party (the "disputing Party") shall provide the other Party with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this LGIA.

- 27.2 External Arbitration Procedures.** Any arbitration initiated under this LGIA shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) Calendar Days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules") and any applicable FERC regulations; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Article 27, the terms of this Article 27 shall prevail.
- 27.3 Arbitration Decisions.** Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of this LGIA and shall have no power to modify or change any provision of this Agreement in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator(s) must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.
- 27.4 Costs.** Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

## ARTICLE 28. REPRESENTATIONS, WARRANTIES AND COVENANTS

- 28.1 General.** Each Party makes the following representations, warranties and covenants:
- 28.1.1 Good Standing.** Such Party is duly organized, validly existing and in good standing under the laws of the state in which it is organized, formed, or incorporated, as applicable; that it is qualified to do business in the state or states in which the Large Generating Facility, Interconnection Facilities and Network Upgrades owned by such Party, as applicable, are located; and that it has the corporate power and authority to own its properties, to carry on its business as now being conducted and to enter into this LGIA and carry out the transactions contemplated hereby and perform and carry out all covenants and obligations on its part to be performed under and pursuant to this LGIA.



- 28.1.2 Authority.** Such Party has the right, power and authority to enter into this LGIA, to become a Party hereto and to perform its obligations hereunder. This LGIA is a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).
- 28.1.3 No Conflict.** The execution, delivery and performance of this LGIA does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Party, or any judgment, license, permit, order, material agreement or instrument applicable to or binding upon such Party or any of its assets.
- 28.1.4 Consent and Approval.** Such Party has sought or obtained, or, in accordance with this LGIA will seek or obtain, each consent, approval, authorization, order, or acceptance by any Governmental Authority in connection with the execution, delivery and performance of this LGIA, and it will provide to any Governmental Authority notice of any actions under this LGIA that are required by Applicable Laws and Regulations.

#### ARTICLE 29. [RESERVED]

#### ARTICLE 30. MISCELLANEOUS

- 30.1 Binding Effect.** This LGIA and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 30.2 Conflicts.** In the event of a conflict between the body of this LGIA and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this LGIA shall prevail and be deemed the final intent of the Parties.
- 30.3 Rules of Interpretation.** This LGIA, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this LGIA, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this LGIA), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any Applicable Laws and Regulations means such Applicable Laws and Regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article of this LGIA or such Appendix to this LGIA, or such Section to the LGIP or such Appendix to the LGIP, as the case may be;

(6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this LGIA as a whole and not to any particular Article or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".

- 30.4 Entire Agreement.** This LGIA, including all Appendices and Schedules attached hereto, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between or among the Parties with respect to the subject matter of this LGIA. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this LGIA.
- 30.5 No Third Party Beneficiaries.** This LGIA is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.
- 30.6 Waiver.** The failure of a Party to this LGIA to insist, on any occasion, upon strict performance of any provision of this LGIA will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this LGIA shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this LGIA. Termination or Default of this LGIA for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO. Any waiver of this LGIA shall, if requested, be provided in writing.

- 30.7 Headings.** The descriptive headings of the various Articles of this LGIA have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this LGIA.
- 30.8 Multiple Counterparts.** This LGIA may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 30.9 Amendment.** The Parties may by mutual agreement amend this LGIA by a written instrument duly executed by all of the Parties. Such amendment shall become effective and a part of this LGIA upon satisfaction of all Applicable Laws and Regulations.
- 30.10 Modification by the Parties.** The Parties may by mutual agreement amend the Appendices to this LGIA by a written instrument duly executed by all of the Parties. Such amendment shall become effective and a part of this LGIA upon satisfaction of all Applicable Laws and Regulations.

**30.11 Reservation of Rights.** The CAISO and Participating TO shall each have the right to make a unilateral filing with FERC to modify this LGIA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles and Appendices of this LGIA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these Articles and Appendices:

Recitals, 1, 2.1, 2.2, 2.3, 2.4, 2.6, 3.1, 3.3, 4.1, 4.2, 4.3, 4.4, 5 preamble, 5.4, 5.7, 5.8, 5.9, 5.12, 5.13, 5.18, 5.19.1, 7.1, 7.2, 8, 9.1, 9.2, 9.3, 9.5, 9.6, 9.7, 9.8, 9.10, 10.3, 11.4, 12.1, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24.3, 24.4, 25.1, 25.2, 25.3 (excluding subparts), 25.4.2, 26, 28, 29, 30, Appendix D, Appendix F, Appendix G, and any other Article not reserved exclusively to the Participating TO or the CAISO below.

The Participating TO shall have the exclusive right to make a unilateral filing with FERC to modify this LGIA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles and Appendices of this LGIA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these Articles and Appendices:

2.5, 5.1, 5.2, 5.3, 5.5, 5.6, 5.10, 5.11, 5.14, 5.15, 5.16, 5.17, 5.19 (excluding 5.19.1), 6, 7.3, 9.4, 9.9, 10.1, 10.2, 10.4, 10.5, 11.1, 11.2, 11.3, 11.5, 12.2, 12.3, 12.4, 24.1, 24.2, 25.3.1, 25.4.1, 25.5 (excluding 25.5.1), 27 (excluding preamble), Appendix A, Appendix B, Appendix C, and Appendix E.

The CAISO shall have the exclusive right to make a unilateral filing with FERC to modify this LGIA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles of this LGIA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these Articles:

3.2, 4.5, 11.6, 25.3.2, 25.5.1, and 27 preamble.

The Interconnection Customer, the CAISO, and the Participating TO shall have the right to make a unilateral filing with FERC to modify this LGIA pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this LGIA shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

**30.12 No Partnership.** This LGIA shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership among the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.

**30.13 Joint and Several Obligations.** Except as otherwise provided in this LGIA, the obligations of the CAISO, the Participating TO, and the Interconnection Customer are several, and are neither joint nor joint and several.

**IN WITNESS WHEREOF**, the Parties have executed this LGIA in multiple originals, each of which shall constitute and be an original effective agreement among the Parties.

**[Insert name of Interconnection Customer]**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date:

**[Insert name of Participating TO]**

By: \_\_\_\_\_

Title:

Date:

**California Independent System Operator Corporation**

By:

Title:

Date:

**Appendices to LGIA**

- Appendix A Interconnection Facilities, Network Upgrades and Distribution Upgrades
- Appendix B Milestones
- Appendix C Interconnection Details
- Appendix D Security Arrangements Details
- Appendix E Commercial Operation Date
- Appendix F Addresses for Delivery of Notices and Billings
- Appendix G Interconnection Customer's Proportional Share of Costs of Network Upgrades for Applicable Project Group
- Appendix H Interconnection Requirements for a Wind Generating Plant

**Appendix A  
To LGIA**

**Interconnection Facilities, Network Upgrades and Distribution Upgrades**

**1. Interconnection Facilities:**

(a) [insert Interconnection Customer's Interconnection Facilities]:

(b) [insert Participating TO's Interconnection Facilities]:

**2. Network Upgrades:**

(a) [insert Stand Alone Network Upgrades]:

(b) [insert Other Network Upgrades]:

(i) [insert Participating TO's Reliability Network Upgrades]

(ii) [insert Participating TO's Delivery Network Upgrades]

**3. Distribution Upgrades:**

**Appendix B  
To LGIA**

**Milestones**

**Appendix C  
To LGIA**

**Interconnection Details**



**Appendix D  
To LGIA**

**Security Arrangements Details**

Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, all Participating TOs, market participants, and Interconnection Customers interconnected to the CAISO Controlled Grid to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

The Interconnection Customer shall meet the requirements for security implemented pursuant to the CAISO Tariff, including the CAISO's standards for information security posted on the CAISO's internet web site at the following internet address: <http://www.caiso.com/pubinfo/info-security/index.html>.

**Appendix E  
To LGIA**

**Commercial Operation Date**

[This Appendix E sets forth a form of letter to be provided by the Interconnection Customer to the CAISO and Participating TO to provide formal notice of the Commercial Operation of an Electric Generating Unit.]

**[Date]**

**[CAISO Address]**

**[Participating TO Address]**

Re: \_\_\_\_\_ Electric Generating Unit

Dear \_\_\_\_\_:

On **[Date]** **[Interconnection Customer]** has completed Trial Operation of Unit No. \_\_\_\_\_. This letter confirms that **[Interconnection Customer]** commenced Commercial Operation of Unit No. \_\_\_\_\_ at the Electric Generating Unit, effective as of **[Date plus one day]** and that **[Interconnection Customer]** provided the CAISO's operations personnel advance notice of its intended Commercial Operation Date no less than five Business Days prior to that date.

Thank you.

**[Signature]**

**[Interconnection Customer Representative]**

**Appendix F  
To LGIA**

**Addresses for Delivery of Notices and Billings**

**Notices:**

Participating TO:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

CAISO:

[To be supplied.]

**Billings and Payments:**

Participating TO:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

CAISO:

[To be supplied.]

**Alternative Forms of Delivery of Notices (telephone, facsimile or e-mail):**

Participating TO:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

CAISO:

[To be supplied.]

**Appendix G  
To LGIA**

**Interconnection Customer's Proportional Share of Costs of Network Upgrades for Applicable  
Project Group**

**Appendix H  
To LGIA**

**INTERCONNECTION REQUIREMENTS FOR A WIND GENERATING PLANT**

Appendix H sets forth requirements and provisions specific to a wind generating plant. All other requirements of this LGIA continue to apply to wind generating plant interconnections.

**A. Technical Standards Applicable to a Wind Generating Plant**

**i. Low Voltage Ride-Through (LVRT) Capability**

A wind generating plant shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below.

All wind generating plants subject to FERC Order No. 661 must meet the following requirements:

1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 – 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the Participating TO. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the CAISO Controlled Grid. A wind generating plant shall remain interconnected during such a fault on the CAISO Controlled Grid for a voltage level as low as zero volts, as measured at the high voltage side of the wind GSU.
2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.
3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAR Compensator) within the wind generating plant or by a combination of generator performance and additional equipment.
5. Existing individual generator units that are, or have been, interconnected to the CAISO Controlled Grid at the same location at the effective date of the Appendix H LVRT Standard are exempt from meeting the Appendix H LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Appendix H LVRT Standard.

**ii. Power Factor Design Criteria (Reactive Power)**

A wind generating plant shall operate within a power factor within the range of 0.95 leading to 0.95 lagging, measured at the Point of Interconnection as defined in this LGIA in order to maintain a specified voltage schedule, if the Phase II Interconnection Study shows that such a requirement is necessary to ensure safety or reliability. The power factor range standard can be met by using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two, if agreed to by the Participating TO and CAISO. The Interconnection Customer shall not disable power factor equipment while the wind plant is in operation. Wind plants shall also be able to provide sufficient dynamic voltage support in lieu of the power system stabilizer and automatic voltage regulation at the generator excitation system if the Phase II Interconnection Study shows this to be required for system safety or reliability.

**iii. Supervisory Control and Data Acquisition (SCADA) Capability**

The wind plant shall provide SCADA capability to transmit data and receive instructions from the Participating TO and CAISO to protect system reliability. The Participating TO and CAISO and the wind plant Interconnection Customer shall determine what SCADA information is essential for the proposed wind plant, taking into account the size of the plant and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

**California Independent System     ) Docket No. ER08-\_\_\_\_-000  
Operator Corporation             )**

**CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION  
GENERATION INTERCONNECTION PROCESS REFORM  
TARIFF AMENDMENT**

**VOLUME 3 OF 4**

**BLACKLINE SHEETS**

**July 28, 2008**



**Attachment C1 – Blacklines**

**Generation Interconnection Process Reform Amendment Filing**

**Currently Effective CAISO Tariff**

## **25 INTERCONNECTION OF GENERATING UNITS AND GENERATING FACILITIES TO THE ISO CONTROLLED GRID.**

### **25.1 Applicability.**

This Section 25 and Appendix U (the Standard Large Generator Interconnection Procedures (LGIP)), Appendix GG (the LGIP for Interconnection Requests in a Queue Cluster Window), ~~set forth in ISO Tariff Appendix U, Appendix AA (the Small Generator Interconnection Procedures (SGIP)) set forth in ISO Tariff Appendix AA, or ISO Tariff Appendix W, as applicable, shall apply to:~~

- (a) each new Generating Unit that seeks to interconnect to the ISO Controlled Grid;
- (b) each existing Generating Unit connected to the ISO Controlled Grid that will be modified with a resulting increase in the total capability of the power plant;
- (c) each existing Generating Unit connected to the ISO Controlled Grid that will be modified without increasing the total capability of the power plant but has changed the electrical characteristics of the power plant such that its re-energization may violate Applicable Reliability Criteria; and
- (d) each existing eQualifying fFacility Generating Unit connected to the ISO Controlled Grid whose total Generation was previously sold to a Participating TO or on-site customer but whose Generation, or any portion thereof, will now be sold in the wholesale market, subject to Section 25.1.2 below.

**25.1.1** The owner of a Generating Unit described in Section 25.1 (a), (b), or (c), or its designee, shall be an Interconnection Customer required to submit an Interconnection Request and comply with Appendix U (the LGIP), Appendix GG (the LGIP for Interconnection Requests in a Queue Cluster Window), Appendix AA (SGIP), or ~~ISO Tariff Appendix W, as applicable, which applicability shall be based on the maximum rated capacity of the new total capability of the power plant, including the capability of all ~~e~~-multiple energy ~~f~~ production devices at a site, consistent with Section 4.10 of the SGIP.~~

**25.1.2** If the owner of a eQualifying fFacility described in Section 25.1(d), or its designee, represents that the total capability and electrical characteristics of the eQualifying fFacility will be substantially unchanged, then that entity must submit an affidavit to the ISO and the applicable

Participating TO representing that the total capability and electrical characteristics of the eQualifying fFacility will remain substantially unchanged. If there is any change to the total capability and electrical characteristics of the eQualifying fFacility, however, the affidavit shall include supporting information describing any such changes. The ISO and the applicable Participating TO shall have the right to verify whether or not the total capability or electrical characteristics of the qualifying facility have changed or will change.

**25.1.2.1** If the ISO and the applicable Participating TO confirm that the electrical characteristics are substantially unchanged, then that request will not be placed into the interconnection queue.

However, the owner of the eQualifying fFacility, or its designee, will be required to execute a Standard Large Generator Interconnection Agreement in accordance with Section 11 of Appendix U (the LGIP), a Large Generator Interconnection Agreement in accordance with Section 11 of Appendix GG (the LGIP for Interconnection Requests in a Queue Cluster Window), a Small Generator Interconnection Agreement in accordance with Section 3.3.4, 3.4.5, or 3.5.7 and Section 4.8 of the SGIP, or an interconnection agreement in accordance with ~~ISO Tariff~~Appendix W, as applicable.

**25.1.2.2** If the ISO and the applicable Participating TO cannot confirm that the total capability and electrical characteristics are and will be substantially unchanged, then the owner of the eQualifying fFacility, or its designee, shall be an Interconnection Customer required to submit an Interconnection Request and comply with Appendix U (the LGIP), Appendix GG (the LGIP for Interconnection Requests in a Queue Cluster Window), Appendix AA (the LGIASGIP), or ~~ISO Tariff~~Appendix W, as applicable.

## **25.2 Interconnections to the Distribution System.**

Any proposed interconnection by the owner of a planned Generating Unit, or its designee, to connect that Generating Unit to a Distribution System of a Participating TO will be processed, as applicable, pursuant to the Wholesale Distribution Access Tariff or CPUC Rule 21, or other Local Regulatory Authority requirements, if applicable, of the Participating TO; provided, however, that the owner of the planned Generating Unit, or its designee, shall be required to mitigate any adverse impact on reliability of the ISO Controlled Grid consistent with Appendix U (the Standard Large Generator Interconnection Procedures) and Appendix GG (the LGIP for Interconnection Requests in a Queue Cluster Window). In addition, each

Participating TO will provide to the ISO a copy of the system impact study used to determine the impact of a planned Generating Unit on the Distribution System and the ISO Controlled Grid pursuant to a request to interconnect under the applicable Wholesale Distribution Access Tariff or CPUC Rule 21, or other Local Regulatory Authority requirements, if applicable.

### **25.3 Maintenance of Encumbrances.**

No new Generating Unit shall adversely affect the ability of the applicable Participating TO to honor its Encumbrances existing as of the time an Interconnection Customer submits its Interconnection Request to the ISO. The applicable Participating TO, in consultation with the ISO, shall identify any such adverse effect on its Encumbrances in the Interconnection System Impact Study performed under Section 7 of Appendix U (the LGIP), the Phase I Interconnection Study performed under Section 6 of Appendix GG (the LGIP for Interconnection Requests in a Queue Cluster Window), the system impact study performed ~~or~~ under Section 3.4 of the SGIP, or the System Impact Study performed under Section 5.1 of ISO Tariff Appendix W, as applicable. To the extent the applicable Participating TO determines that the connection of the new Generating Unit will have an adverse effect on Encumbrances, the Interconnection Customer shall mitigate such adverse effect.

\* \* \*

## **ISO Tariff Appendix A**

### **Master Definitions Supplement**

\* \* \*

#### **Commercial Operation**

The status of a Generating Unit or project phase at a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

#### **Commercial Operation**

#### **Date**

The date on which a Generating Unit or project phase at a Generating Facility commences Commercial Operation as agreed to by the applicable Participating TO, ~~the CAISO,~~ and the Interconnection Customer pursuant to Appendix E to the ~~Standard~~ Large Generator Interconnection Agreement, and in accordance with the implementation plan agreed to by the Participating TO and the CAISO for multiple individual Generating Units or project phases

at a Generating Facility where an Interconnection Customer intends to establish separate Commercial Operation Dates for those Generating Units or project phases.

\* \* \*

**Construction Activities**

Actions by a Participating TO that result in irrevocable financial commitments for the purchase of major electrical equipment or land for Participating TO's Interconnection Facilities or Network Upgrades assigned to the Interconnection Customer that occur after receipt of all appropriate governmental approvals needed for the Participating TO's Interconnection Facilities or Network Upgrades.

\* \* \*

**Full Capacity Deliverability Status**

The condition whereby a Large Generating Facility interconnected with the CAISO Controlled Grid, under coincident CAISO Control Area peak Demand and a variety of severely stressed system conditions, can deliver the Large Generating Facility's full output to the aggregate of Load on the CAISO Controlled Grid, consistent with the CAISO's reliability criteria and procedures and the CAISO On-Peak Deliverability Assessment.

\* \* \*

**Group Study**

The process whereby more than one Interconnection Request is studied together, instead of individually, for the purpose of conducting one or more of the Interconnection Studies or analyses therein.

\* \* \*

**Interconnection Base Case Data**

Data including, but not limited to, base power flow, short circuit and stability databases, underlying Load, Generation, and transmission facility assumptions, Contingency lists, including relevant Remedial Action Schemes, per unit costs, and transmission diagrams used to perform Phase I Interconnection Studies and Phase II Interconnection Studies. Interconnection Base Case Data may include Critical Energy Infrastructure Information (as that term is defined by FERC). The Interconnection Base Case Data shall include transmission facilities approved by the CAISO under Section 24 in Appendix EE and Network Upgrades associated with

Generation Facilities in (iv) below and Generating Facilities that (i) are directly interconnected to the CAISO Controlled Grid; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending request to interconnect to an Affected System; or (iv) are not interconnected to the CAISO Controlled Grid, but are subject to a fully executed LGIA (or its equivalent predecessor agreement) or for which an unexecuted LGIA (or its equivalent predecessor agreement) has been requested to be filed with FERC. To the maximum extent practicable, the Interconnection Base Case Data shall utilize the Unified Planning Assumptions developed pursuant to Section 24.2.4 in Appendix EE.

\* \* \*

**Interconnection  
Customer's  
Interconnection Facilities**

All facilities and equipment, as identified in ~~Part~~Appendix A of the ~~Standard~~-Large Generator Interconnection Agreement, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the ISO Controlled Grid. Interconnection Customer's Interconnection Facilities are sole use facilities.

\* \* \*

**Interconnection Financial  
Security**

Any of the financial instruments listed in LGIP Section 9.1 set forth in Appendix GG that are posted by an Interconnection Customer.

\* \* \*

**Interconnection Request**

An Interconnection Customer's request, in the form of ~~Part~~Appendix 1 to the ~~Standard~~-Large Generator Interconnection Procedures or Attachment 2 to the Small Generator Interconnection Procedures, in accordance with Section 25.1 of the ISO Tariff.

**Interconnection Service**

The service provided by the Participating TO and ISO associated with interconnecting the Interconnection Customer's Generating Facility to the ISO Controlled Grid and enabling it to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the ~~Standard~~-Large Generator Interconnection Agreement, the Participating TO's TO Tariff, and the ISO Tariff.

**Interconnection Study**

Any of the following studies: the Interconnection Feasibility Study,

the Interconnection System Impact Study, and the Interconnection Facilities Study described in the Standard Large Generator Interconnection Procedures set forth in Appendix U or the Phase I Interconnection Study and the Phase II Interconnection Study described in the LGIP set forth in Appendix GG.

\* \* \*

**Interconnection Study Cycle**

All requirements, actions, and respective obligations of the CAISO, Participating TO, and Interconnection Customer under the LGIP set forth in Appendix GG applicable to an Interconnection Request submitted in a particular Queue Cluster Window through execution by the parties or submission to FERC by one or more of the parties to an LGIA.

\* \* \*

**Interconnection Study Deposit**

The cash deposit provided to the CAISO by Interconnection Customers under LGIP Section 3.5.1 set forth in Appendix GG as a requirement of a valid Interconnection Request to be used to offset the cost of the Interconnection Studies as set forth in LGIP Sections 3.5.1.2 and 3.5.1.3 set forth in Appendix GG.

\* \* \*

**Large Generator Interconnection Agreement (LGIA)**

The form of interconnection agreement applicable to an Interconnection Request pertaining to a Large Generating Facility, a *pro forma* version of which is set forth in Appendix V or Appendix HH, as applicable.

**Large Generator Interconnection Procedures (LGIP)**

The interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that are set forth in Appendix U or Appendix GG, as applicable.

\* \* \*

**Large Generator Interconnection Study Process Agreement (LGISPA)**

The agreement between the CAISO and the Interconnection Customer for conducting the Interconnection Studies for a proposed Large Generating Facility, a *pro forma* version of which is accepted by FERC, posted on the CAISO Website, and set forth in Appendix GG.

\* \* \*

**LGIA**

Standard Large Generator Interconnection Agreement or Large Generator Interconnection Agreement

**LGIP**

Standard Large Generator Interconnection Procedures or Large Generator Interconnection Procedures

\* \* \*

**LGISPA**

Large Generator Interconnection Study Process Agreement

\* \* \*

**Off-Peak Deliverability Assessment**

The technical study performed under LGIP Section 6.3.2.2 set forth in Appendix GG.

\* \* \*

**On-Peak Deliverability Assessment**

The technical study performed under LGIP Section 6.3.2.1 set forth in Appendix GG.

\* \* \*

**Participating TO's Interconnection Facilities**

All facilities and equipment owned, controlled, or operated by the Participating TO from the Point of Change of Ownership to the Point of Interconnection as identified in ~~Part~~Appendix A to the Standard Large Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Participating TO's Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

\* \* \*

**Phase I Interconnection Study**

The engineering study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), that evaluates the impact of the proposed interconnection on the safety and reliability of the CAISO Controlled Grid and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility(ies) were interconnected without identified project modifications or system modifications, as provided in the On-Peak Deliverability Assessment or Off-Peak Deliverability Assessment, and other potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Large Generator Interconnection Procedures set forth in Appendix GG. The study will also identify the approximate total costs, based on per unit costs, of mitigating these impacts.



**Phase II Interconnection Study**

along with an equitable allocation of those costs to Interconnection Customers for their individual Generating Facilities.

An engineering and operational study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), to determine the Point of Interconnection and a list of facilities (including the Participating TO's Interconnection Facilities, Network Upgrades, Distribution Upgrades, and Stand Alone Network Upgrades), the cost of those facilities, and the time required to interconnect the Generating Facility(ies) with the CAISO Controlled Grid.

\* \* \*

**Point of Change of Ownership**

The point, as set forth in ~~Part~~Appendix A to the ~~Standard~~-Large Generator Interconnection Agreement, where the Interconnection Customer's Interconnection Facilities connect to the Participating TO's Interconnection Facilities.

**Point of Interconnection**

The point, as set forth in ~~Part~~Appendix A to the ~~Standard~~-Large Generator Interconnection Agreement or Attachment 3 to the Small Generator Interconnection Agreement, where the Interconnection Facilities connect to the ISO Controlled Grid.

\* \* \*

**Pre-Construction Activities**

Actions by a Participating TO, other than those required by an Engineering and Procurement Agreement under LGIP Section 10 in Appendix GG, undertaken prior to Construction Activities in order to prepare for the construction of Participating TO's Interconnection Facilities or Network Upgrades assigned to the Interconnection Customer, including, but not limited to, preliminary engineering, permitting activities, environmental analysis, or other activities specifically needed to obtain governmental approvals for the Participating TO's Interconnection Facilities or Network Upgrades.

\* \* \*

**Reliability Network Upgrades**

The transmission facilities at or beyond the Point of Interconnection identified in the Interconnection Studies as necessary to interconnect one or morea Large Generating Facility(ies) safely and reliably to the ISO Controlled Grid, which would not have been necessary but for the interconnection of one or morethe Large Generating Facility(ies), including Network Upgrades necessary to

remedy short circuit or stability problems, or thermal overloads. Reliability Network Upgrades shall only be deemed necessary for thermal overloads, occurring under any system condition, where such thermal overloads cannot be adequately mitigated through Congestion Management, Operating Procedures, or special protection systems based on the characteristics of the Large Generating Facilities included in the Interconnection Studies, limitations on market models, systems, or information, or other factors specifically identified in the Interconnection Studies resulting from the interconnection of the Large Generating Facility to the ISO Controlled Grid. Reliability Network Upgrades also include, consistent with WECC practice, the facilities necessary to mitigate any adverse impact the Large Generating Facility's interconnection may have on a path's WECC rating.

\* \* \*

### **Results Meeting**

The meeting among the CAISO, the applicable Participating TO(s), the Interconnection Customer, and, if applicable, other Affected System Operators to discuss the results of the Phase I Interconnection Study as set forth in LGIP Section 6 set forth in Appendix GG.

\* \* \*

### **Site Exclusivity**

Documentation reasonably demonstrating:

(1) For private land:

(a) Ownership of, a leasehold interest in, or a right to develop property upon which the Generating Facility will be located consisting of a minimum of 50% of the acreage reasonably necessary to accommodate the Generating Facility; or

(b) an option to purchase or acquire a leasehold interest in property upon which the Generating Facility will be located consisting of a minimum of 50% of the acreage reasonably necessary to accommodate the Generating Facility.

(2) For public land, including that controlled or managed by any federal, state or local agency, a final, non-appealable permit, license, or other right to use the property for the purpose of

generating electric power and in acreage reasonably necessary to accommodate the Generating Facility, which exclusive right to use public land under the management of the federal Bureau of Land Management shall be in a form specified by the Bureau of Land Management.

**Site Exclusivity Deposit**

The cash deposit provided to the CAISO by Interconnection Customers under LGIP Section 3.5.1 set forth in Appendix GG as an option in lieu of demonstrating Site Exclusivity for a valid Interconnection Request and treated in accordance with LGIP Section 3.5.1.4 set forth in Appendix GG.

\* \* \*

**Stand Alone Network Upgrades**

Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the ISO Controlled Grid or Affected Systems during their construction. The Participating TO, the ISO, and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the ~~Standard~~ Large Generator Interconnection Agreement.

**Standard Large Generator Interconnection Agreement (LGIA)**

The form of interconnection agreement applicable to an Interconnection Request pertaining to a Large Generating Facility, a pro forma version of which is set forth in Appendix V.

**Standard Large Generator Interconnection Procedures (LGIP)**

The ISO Protocol that sets forth the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that is ~~included set forth in Appendix U~~ the ISO Tariff.

\* \* \*

**ISO TARIFF APPENDIX U**

**Standard Large Generator Interconnection Procedures (LGIP)**

\* \* \*

**SECTION 1. OBJECTIVES, DEFINITIONS, AND INTERPRETATION.**

**1.1 Objectives.**

The objective of this LGIP is to implement FERC's Order No. 2003 setting forth the requirements for Large Generating Facility interconnections to the ISO Controlled Grid. This LGIP applies to Interconnection Requests not assigned to a Queue Cluster Window pursuant to the terms of this CAISO Tariff for the performance of its Interconnection Studies.

\* \* \*

## **Section 2. Scope and Application.**

### **2.1 Application of Standard Large Generator Interconnection Procedures.**

Sections 2 through 13 of this LGIP apply to processing an Interconnection Request pertaining to a Large Generating Facility that is not assigned to a Queue Cluster Window pursuant to the terms of this CAISO Tariff for the performance of its Interconnection Studies.

\* \* \*

## **Section 11. Standard Large Generator Interconnection Agreement (LGIA).**

### **11.1 Tender.**

**11.1.1** Within thirty (30) Calendar Days after the ISO receives the Interconnection Customer's written comments, or notification of no comments, to the draft Interconnection Facilities Study report, the applicable Participating TO(s) and the ISO shall tender a draft LGIA, together with draft appendices. The draft LGIA shall be in the form of the FERC-approved standard form LGIA set forth in CAISO Tariff Appendix V. The Interconnection Customer shall provide written comments, or notification of no comments, to the draft appendices to the applicable Participating TO(s) and the ISO within (30) Calendar Days of receipt.

\* \* \*

## **ISO TARIFF APPENDIX V**

### **Standard Large Generator Interconnection Agreement (LGIA)**

\* \* \*

#### **ARTICLE 1. DEFINITIONS**

\* \* \*

**Standard Large Generator Interconnection Procedures (LGIP)** shall mean the ISO protocol that sets forth the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that is included in ~~the~~ ISO Tariff Appendix U.

\* \* \*

## **ISO TARIFF APPENDIX DD**

### **Small Generator Interconnection Agreement (SGIA)**

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### **1.5 Responsibilities of the Parties**

**1.5.1** The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice. The Parties shall use the ~~Standard Large Generator Interconnection Agreement (ISO Tariff Appendix V or Appendix HH, as applicable)~~ to interpret the responsibilities of the Parties under this Agreement.

\* \* \*

## ISO TARIFF APPENDIX EE

### Transmission Expansion and Planning Process

\* \* \*

#### PART A. Transmission Expansion and Planning Process

\* \* \*

##### 24.1.2 Reliability Driven Projects.

The CAISO in coordination with each Participating TO with a PTO Service Territory will, consistent with the procedures set forth in the Business Practice Manual, identify the need for any transmission additions or upgrades required to ensure System Reliability consistent with all Applicable Reliability Criteria and CAISO Planning Standards. In making this determination, the CAISO, in coordination with each Participating TO with a PTO Service Territory and other Market Participants, shall consider lower cost alternatives to the construction of transmission additions or upgrades, such as acceleration or expansion of existing projects, Demand-side management, Remedial Action Schemes, appropriate Generation, interruptible Loads or reactive support. The CAISO shall direct each Participating TO with a PTO Service Area, as a registered Transmission Planner with NERC, to perform the necessary studies, based on the Unified Planning Assumptions and Study Plan as set forth in Section 24.2.3 of this Appendix EE, any applicable Interconnection Study, and in accordance with the Business Practice Manual, to determine the facilities needed to meet all Applicable Reliability Criteria and CAISO Planning Standards. The Participating TO with a PTO Service Area shall provide the CAISO and other Market Participants with all information relating to the studies performed under this Section, subject to any limitation provided in Section 20.2 of the CAISO Tariff or the applicable LGIP. The CAISO shall be free to propose any transmission upgrades or additions it deems necessary to ensure System Reliability consistent with Applicable Reliability Criteria and CAISO Planning Standards. The Participating TO with a PTO Service Territory in which the transmission upgrade or addition deemed needed under this Section 24.1.2 of this Appendix EE is to be located shall be the Project Sponsor, with the responsibility to construct, own and finance, and maintain such transmission upgrade or addition.

\* \* \*

**24.1.3.2 Demonstration of Interest in a Location Constrained Resource Interconnection Facility.**

A proponent of an LCRIF must demonstrate interest in the LCRIF equal to sixty percent (60%) or more of the capacity of the facility in the following manner:

- (a) the proponent's demonstration must include a showing that LCRIGs that would connect to the facility and would have a combined capacity equal to at least twenty-five percent (25%) of the capacity of the facility have executed Large Generator Interconnection Agreements or Small Generator Interconnection Agreements, as applicable; and
- (b) to the extent the showing pursuant to Section 24.1.3.2(a) of Appendix EE does not constitute sixty percent (60%) of the capacity of the LCRIF, the proponent's demonstration of the remainder of the required minimum level of interest must include a showing that additional LCRIGs:
  - (1) in the case of Large Generating Facilities subject to the LGIP set forth in Appendix GG, have obtained Site Exclusivity or paid the Site Exclusivity Deposit in lieu of Site Exclusivity, provided that any Site Exclusivity Deposit paid pursuant to Section 3.5 of the LGIP set forth in Appendix GG shall satisfy this requirement, or, in the case of Large Generating Facilities subject to the LGIP set forth in Appendix U and Small Generating Facilities, have obtained control over their site or paid a deposit to the CAISO in the amount of \$250,000, which deposit shall be refundable if the LCRIF is not approved or is withdrawn by the proponent; and
  - (2) have demonstrated interest in the LCRIF by one of the following methods:
    - (i) executing a firm power sales agreement for the output of the LCRIG for a period of five years or longer; or
    - (ii) in the case of Large Generating Facilities subject to the LGIP set forth in Appendix GG, filing an Interconnection Request and paying the Interconnection Study Deposit required by Section 3.5 of the LGIP set forth in Appendix GG; or

- (iii) in the case of Large Generating Facilities subject to the LGIP set forth in Appendix U and Small Generating Facilities, being in the CAISO's interconnection queue and paying a deposit to the CAISO equal to the sum of the minimum deposits required of an Interconnection Customer for all studies performed in accordance with the Large Generator Interconnection Procedures (Appendix U) or Small Generator Interconnection Procedures (Appendix AA), as applicable to the LCRIG, less the amount of any deposits actually paid by the LCRIG for such studies. The deposit shall be credited toward such study costs. If the LCRIF is not approved or is withdrawn by the proponent, any deposit paid under this provision shall be refundable to the extent it exceeds costs incurred by the CAISO for such studies; or
- (iv#) paying a deposit to the CAISO equal to five percent (5%) of the LCRIG's pro rata share of the capital costs of a proposed LCRIF. The deposit shall be credited toward ~~study costs~~ of Interconnection Studies performed in connection with the Large Generator Interconnection Procedures (Appendix U or Appendix GG, as applicable) or Small Generator Interconnection Procedures (Appendix AA), whichever is applicable. If the LCRIF is not approved or is withdrawn by the proponent, any deposit paid under this provision shall be refundable to the extent it exceeds the costs incurred by the CAISO for such studies.

\* \* \*

#### **24.1.3.4 Evaluation of Location Constrained Resource Interconnection Facilities.**

In evaluating whether a proposed LCRIF that meets the requirements of Section 24.1.3.1 of this Appendix EE is needed, and for purposes of ranking and prioritizing LCRIF projects, the CAISO will consider the following factors:

- (a) Whether, and if so, the extent to which, the facility meets or exceeds applicable CAISO Planning Standards, including standards that are Applicable Reliability Criteria.

- (b) Whether, and if so, the extent to which, the facility has the capability and flexibility both to interconnect potential LCRIGs in the Energy Resource Area and to be converted in the future to a network transmission facility.
- (c) Whether the projected cost of the facility is reasonable in light of its projected benefits, in comparison to the costs and benefits of other alternatives for connecting Generating Units or otherwise meeting a need identified in the CAISO Transmission Planning Process, including alternatives that are not LCRIFs. In making this determination, the CAISO shall take into account, among other factors, the following:
- (1) The potential capacity of LCRIGs and the potential Energy that could be produced by LCRIGs in each Energy Resource Area;
  - (2) The capacity of LCRIGs in the CAISO's interconnection ~~queue~~process for each Energy Resource Area;
  - (3) The projected cost and in-service date of the facility in comparison with other transmission facilities that could connect LCRIGs to the CAISO Controlled Grid;
  - (4) Whether, and if so, the extent to which, the facility would provide additional reliability or economic benefits to the CAISO Controlled Grid; and
  - (5) Whether, and if so, the extent to which, the facility would create a risk of stranded costs.

\* \* \*

## **24.2 Transmission Planning and Coordination.**

The CAISO shall perform the CAISO's Transmission Planning Process on an annual cycle in accordance with the terms of this CAISO Tariff, the Transmission Control Agreement, and the Business Practice Manual. The Transmission Planning Process shall, at a minimum:

- (a) Coordinate and consolidate the transmission needs of the CAISO Control Area into a single plan, which will be assessed on the basis of maintaining the reliability of the CAISO Controlled Grid in accordance with Applicable Reliability Criteria and CAISO Planning Standards, in a manner that promotes the



economic efficiency of the CAISO Controlled Grid and considers federal and state environmental and other policies affecting the provision of Energy.

- (b) Reflect a planning horizon covering a minimum of ten (10) years that considers transmission enhancements and expansions, Demand Forecasts, Demand-side management, and capacity forecasts relating to generation technology type, additions and retirements, and such other factors as the CAISO determines are relevant.
- (c) Seek to avoid unnecessary duplication of facilities and ensure the simultaneous feasibility of the CAISO Transmission Plan and the transmission plans of interconnected Control Areas, and otherwise coordinate with regional and sub-regional transmission planning processes and entities in accordance with Section 24.8 of this Appendix EE.
- (d) Identify existing and projected limitations of the CAISO Controlled Grid's physical, economic or operational capability or performance and identify transmission upgrades and additions, including alternatives thereto, deemed needed in accordance with Section 24.1 of this Appendix EE to address the existing and projected limitations.
- (e) Account for any effects on the CAISO Controlled Grid of the interconnection of Generating Units on the Distribution System under the Wholesale Distribution Access Tariffs of the Participating TOs, including an assessment of the deliverability of such Generating Units on a basis comparable to the Deliverability Assessment performed under Appendix U or Appendix GG, as applicable.

\* \* \*

### **24.2.2 Request Window.**

Market Participants may propose Economic Planning Studies and transmission upgrades or additions for inclusion in the annual Transmission Plan during a Request Window. The duration of the Request Window will be set forth in the Business Practice Manual and will occur in the year prior to the year in

which the Transmission Plan is prepared. Proposals for Economic Planning Studies and transmission upgrades or additions must use the forms and satisfy the information and technical requirements set forth in the Business Practice Manual. Proposals for transmission additions or upgrades must be within or connect to the CAISO Control Area or CAISO Controlled Grid and proposals for Economic Planning Studies must be intended to promote competition or economic efficiency of serving Load within the CAISO Control Area, but may relate to Congestion relief or transmission capacity expansion outside the CAISO Control Area. The following proposals will only be considered in the Transmission Plan if proposed during the Request Window:

- (a) Economic transmission upgrades or additions proposed under Section 24.1.1 of this Appendix EE, except for projects costing less than \$50 million that are identified through Participating TO proposals provided pursuant to the Study Plan;
- (b) Location Constrained Resource Interconnection Facilities under Section 24.1.3 of this Appendix EE not identified by the CAISO as part of Interconnection Studies performed under the LGIP set forth in Appendix U or Appendix GG;
- (c) Demand response programs that are proposed for inclusion in the base case or assumptions for the Transmission Plan or as alternatives to transmission additions or upgrades;
- (d) Generation projects that are proposed as solutions to Congestion identified in previously published Economic Planning Studies, for inclusion in long-term planning studies, or as alternatives to transmission additions or upgrades; and
- (e) Requests for Economic Planning Studies.

\* \* \*

### **24.2.3 Additional Planning Information.**

\* \* \*

### **24.2.3.4 Information Requested from Interconnected Control Areas, Sub-Regional Planning Groups and Electric Utility Regulatory Agencies.**

In accordance with Section 24.8 of this Appendix EE, the CAISO shall obtain or solicit from interconnected Control Areas, regional and sub-regional planning groups within the WECC, the CPUC, the CEC, and Local Regulatory Authorities information required by, or anticipated to be useful to, the CAISO in its performance of the Transmission Planning Process, including, but not limited to (1) long-term transmission system plans; (2) long-term resource plans; (3) generation interconnection ~~queue~~process information; (4) Demand forecasts; and (5) any other data necessary for the development of power flow, short-circuit, and stability cases over the planning horizon of the CAISO Transmission Planning Process.

\* \* \*

#### **24.2.4 Unified Planning Assumptions and Study Plan.**

##### **24.2.4.1 Additional Projects and Data for Development of the Unified Planning Assumptions and Study Plan.**

The CAISO will develop Unified Planning Assumptions and Study Plan using information and data received during the Request Window and under Section 24.2.3 of this Appendix EE. The CAISO will also use the following in the development of the Unified Planning Assumptions and Study Plan:

- (1) WECC base cases for the relevant planning horizon;
- (2) transmission upgrades and additions approved by the CAISO and scheduled to be energized within the planning horizon;
- (3) Location Constrained Resource Interconnection Facilities conditionally approved under Section 24.1.3.1(a) of this Appendix EE;
- (4) Network Upgrades identified pursuant to Section 25, Appendix U, Appendix GG, or Appendix W relating to the CAISO's Large Generator Interconnection Procedures and Appendix AA relating to the CAISO's Small Generator Interconnection Procedures;
- (5) operational solutions validated by the CAISO to address Local Capacity Area Resource requirements;
- (6) regulatory initiatives, as appropriate, including state regulatory agency initiated programs;

- (7) Energy Resource Areas or similar resource areas identified as high priority by the CPUC or CEC; and
- (8) results and analyses from Economic Planning Studies or other assessments that may have identified potentially needed transmission upgrades or additions performed in past CAISO Transmission Planning Process cycles.

\* \* \*

#### **24.2.5 Development and Approval of Transmission Plan.**

\* \* \*

##### **24.2.5.2 Development of Transmission Plan.**

- (a) In accordance with the schedule and procedures in the Business Practice Manual, the CAISO will post a draft Transmission Plan. The CAISO will subsequently conduct a stakeholder conference regarding the draft Transmission Plan and solicit comments, consistent with the timelines and procedures set forth in the Business Practice Manual. Additional stakeholder meetings, web conferences, or teleconferences may be scheduled as needed. All stakeholder meetings, web conferences, or teleconferences shall be noticed by Market Notice and such notice shall be posted to the CAISO Website. After consideration of comments, the CAISO will post a final Transmission Plan to the CAISO Website.
- (b) The draft and final Transmission Plan may include, but is not limited to: (1) the results of technical studies performed under the Study Plan; (2) determinations, recommendations, and justifications for the need, according to Section 24.1 of this Appendix EE, for identified transmission upgrades and additions; (3) assessments of transmission upgrades and additions not proposed under Section 24.1 of this Appendix EE and for which need has not been formally determined by the CAISO Governing Board or management, as applicable, under Section 24.1 of this Appendix EE, but which have been identified by the CAISO as potential solutions to transmission needs studied during the

Transmission Planning Process cycle; ~~(43)~~ results of Economic Planning Studies performed during the Transmission Planning Process cycle; ~~and (54)~~ an update on the status of transmission upgrades or additions previously approved by the CAISO, including identification of mitigation plans, if necessary, to address any potential delay in the anticipated completion of an approved transmission upgrade or addition; and (6) to the extent available, the results of Interconnection Studies.

- (c) The Transmission Plan may not include the results of certain technical studies performed as part of the Transmission Planning Process cycle identified in the Unified Planning Assumptions and Study Plan that were scheduled for completion after publication of the Transmission Plan for the Transmission Planning Process cycle.

\* \* \*

**Attachment C2 – Blacklines**  
**Generation Interconnection Process Reform Amendment Filing**

**Currently Effective CAISO Tariff**

\* \* \*

**CAISO TARIFF APPENDIX GG**  
**Large Generator Interconnection Procedures (LGIP)**  
**for Interconnection Requests in a Queue Cluster Window**

**Large Generator  
Interconnection Procedures (LGIP)**

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## **Section 1 Objectives and Definitions.**

### **1.1 Objectives and Applicability.**

The objective of this LGIP is to implement the requirements for Large Generating Facility interconnections to the CAISO Controlled Grid. This LGIP applies to Interconnection Requests assigned to a Queue Cluster Window pursuant to the terms of this CAISO Tariff for the performance of its Interconnection Studies.

### **1.2 Definitions.**

#### **1.2.1 Master Definitions Supplement.**

Unless the context otherwise requires, any word or expression defined in the Master Definitions Supplement, Appendix A to the CAISO Tariff, shall have the same meaning where used in this LGIP. References to LGIP are to this Appendix GG.

#### **1.2.2 Special Definitions for this LGIP.**

In this LGIP, the following words and expressions shall have the meanings set opposite them:

“**Confidential Information**” shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, subject to Section 13.1 of this LGIP.

“**Dispute Resolution**” shall mean the procedure set forth in this LGIP for resolution of a dispute between the Parties.

“**Force Majeure**” shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

“**Governmental Authority**” shall mean any federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, CAISO, or Participating TO, or any Affiliate thereof.

“**Party**” or “**Parties**” shall mean the CAISO, Participating TO(s), Interconnection Customer or the applicable combination of the above.

“**Reasonable Efforts**” shall mean, with respect to an action required to be attempted or taken by a Party under the Large Generator Interconnection Procedures, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

“**Roles and Responsibilities Agreement**” shall mean the Agreement for the Allocation of Responsibilities with Regard to Large Generator Interconnection Procedures and Interconnection Study Agreements, a *pro forma* version of which is attached to this LGIP.

## **Section 2 Scope and Application.**

### **2.1 Application of Large Generator Interconnection Procedures.**

Sections 2 through 13 of this LGIP apply to processing an Interconnection Request pertaining to a Generating Facility assigned to a Queue Cluster Window pursuant to the terms of this CAISO Tariff for the performance of its Interconnection Studies. Appendix 2 of this LGIP sets forth exceptions to the provisions of this LGIP that apply to processing an Interconnection Request pertaining to a Generating Facility that meets the criteria set forth in LGIP Appendix 2.

### **2.2 Comparability.**

The CAISO shall receive, process, and analyze Interconnection Requests in a timely manner as set forth in this LGIP. The CAISO will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers as set forth in this LGIP, whether the Generating Facilities are owned by a Participating TO, its subsidiaries, or Affiliates or others.

### **2.3 Interconnection Base Case Data.**

For each Interconnection Study Cycle, the CAISO, in coordination with applicable Participating TO(s), shall publish updated Interconnection Base Case Data, including, as applicable, separate Interconnection Base Case Data for each Group Study to reflect system conditions particular to the Group Study, to a secured section of the CAISO Website: (1) prior to the Phase I Interconnection Study with the Generation reflected in valid Interconnection Requests submitted in the Queue Cluster Window for the Interconnection Study Cycle; (2) after the Phase I Interconnection Study with the Generation reflected in valid Interconnection Requests submitted in the Queue Cluster Window for the Interconnection Study Cycle, and the identified preliminary transmission upgrades or additions, (3) prior to the Phase II Interconnection Study, including all remaining Generation from the Phase I Interconnection Study for the Interconnection Study Cycle; and (4) after the Phase II Interconnection Study, including all remaining Generation from the applicable Phase I Interconnection Study and the identified transmission upgrades and additions for the Interconnection Study Cycle.

Interconnection Base Case Data shall not include information subject to the confidentiality provisions in LGIP Section 13.1.

The CAISO shall require current and former Interconnection Customers, Market Participants, and electric utility regulatory agencies within California to sign a CAISO confidentiality agreement and, where the current or former Interconnection Customer or Market Participant is not a member of WECC, or its successor, an appropriate form of agreement with WECC, or its successor, as necessary. All other entities or persons seeking Interconnection Base Case Data must satisfy the foregoing requirements as well all requirements under 18 C.F.R. Section 388.113 for obtaining the release of Critical Energy Infrastructure Information (as that term is defined by FERC).

### **2.4 Interconnection Service and Studies.**

#### **2.4.1 No Applicability to Transmission Service.**

Nothing in this LGIP shall constitute a request for transmission service or confer upon an Interconnection Customer any right to receive transmission service.

#### **2.4.2 The Product.**

Interconnection Service allows the Interconnection Customer to connect the Large Generating Facility to the CAISO Controlled Grid and be eligible to deliver the Large Generating Facility's output using the available capacity of the CAISO Controlled Grid. Interconnection Service does not in and of itself convey any right to deliver electricity to any specific customer or point of delivery or rights to any specific MW of available capacity on the CAISO Controlled Grid.

### **2.4.3 The Interconnection Studies.**

The Interconnection Studies consist of a Phase I Interconnection Study and a Phase II Interconnection Study, which will include, but not be limited to, short circuit/fault duty, steady state (thermal and voltage) and stability analyses. The Interconnection Studies will identify direct Interconnection Facilities and required Reliability Network Upgrades necessary to mitigate thermal overloads and voltage violations, and address short circuit, stability, and reliability issues associated with the requested Interconnection Service.

The Interconnection Studies will also identify Delivery Network Upgrades to allow the full output of a Large Generating Facility selecting Full Capacity Deliverability Status, and, as applicable, the maximum allowed output of the interconnecting Large Generating Facility without one or more Delivery Network Upgrades in accordance with the On-Peak Deliverability Assessment and Off-Peak Deliverability Assessment set forth in LGIP Section 6.3.2.

## **Section 3 Interconnection Requests.**

### **3.1 General.**

Pursuant to CAISO Tariff Section 25.1, an Interconnection Customer shall submit to the CAISO an Interconnection Request in the form of Appendix 1 to this LGIP. The CAISO will forward a copy of the Interconnection Request to the applicable Participating TO within three (3) Business Days of receipt.

The Interconnection Customer shall submit a separate Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. The Interconnection Customer must submit a deposit with each Interconnection Request even when more than one request is submitted for a single site. An Interconnection Request to evaluate one site at two different voltage levels shall be treated as two Interconnection Requests.

### **3.2 Roles and Responsibilities.**

- (a) Each Interconnection Request will be subject to the direction and oversight of the CAISO. The CAISO will conduct or cause to be performed the required Interconnection Studies and any additional studies the CAISO determines to be reasonably necessary, and will direct the applicable Participating TO to perform portions of studies where the Participating TO has specific and non-transferable expertise or data and can conduct the studies more efficiently and cost effectively than the CAISO. The CAISO will coordinate with Affected System Operators in accordance with LGIP Section 3.7.
- (b) The CAISO will complete or cause to be completed all studies as required within the timelines provided in this LGIP. Any portion of the studies performed at the direction of the CAISO by the Participating TOs or by a third party shall also be completed within timelines provided in this LGIP.

- (c) The CAISO has established a *pro forma* Roles and Responsibilities Agreement, attached hereto as Appendix 4 and incorporated herein by reference, for execution by the CAISO and the applicable Participating TOs.
- (d) Each Interconnection Customer shall pay the actual costs of all Interconnection Studies, and any additional studies the CAISO determines to be reasonably necessary in response to the Interconnection Request. The CAISO shall reimburse the Participating TO for the actual cost of any portion of all Interconnection Studies that such Participating TO performs at the direction of the CAISO.

### **3.3 Queue Cluster Windows.**

Interconnection Requests must be submitted during a Queue Cluster Window. Separate Queue Cluster Windows shall be established as follows: (i) as provided for in LGIP Appendix 2, Section 1.1; (ii) opening on June 2, 2008 and closing on July 31, 2009; (iii) opening on October 1, 2009 and closing on January 31, 2010; and (iv) thereafter, each calendar year shall have two Queue Cluster Windows with opening and closing dates as set forth in the Business Practice Manual.

Any changes to the Queue Cluster Window interval and opening or closing dates set forth in the Business Practice Manual shall be made in accordance with CAISO Tariff Section 22.11.

### **3.4 [NOT USED]**

### **3.5 Processing of Interconnection Request.**

#### **3.5.1 Initiating an Interconnection Request.**

To initiate an Interconnection Request, except as set forth in LGIP Section 3.5.1.1, the Interconnection Customer must submit during a Queue Cluster Window all of the following: (i) a \$250,000 Interconnection Study Deposit, (ii) a completed application in the form of LGIP Appendix 1, including requested deliverability status, preferred Point of Interconnection and voltage level, and all other required technical data, and (iii) demonstration of Site Exclusivity or a posting of a Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity, at a minimum, must be through the Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility.

##### **3.5.1.1 Initiating an Interconnection Request for Certain Small and Existing Generating Facilities.**

An Interconnection Customer submitting an Interconnection Request relating to (a) a Small Generating Facility seeking a Deliverability Assessment or (b) a Generating Facility, subject to the LGIP in accordance with CAISO Tariff Section 25.1.1, that has achieved Commercial Operation prior to the date of the Interconnection Request, and is seeking to increase the capacity of the Generating Facility by less than 20 MW, must submit during a Queue Cluster Window all of the following: (i) a \$100,000 Interconnection Study Deposit, (ii) a completed application in the form of LGIP Appendix 1, including requested deliverability status, preferred Point of Interconnection and voltage level, and all other required technical data, and (iii) demonstration of Site Exclusivity, which for a Generation Facility under (b) above shall be Site Exclusivity sufficient to accommodate the added capacity, or a posting of an additional Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity, at a minimum, must be through the Commercial Operation Date of the new Generating Facility or increase in capacity of the existing Generating Facility.

### **3.5.1.2 Use of Interconnection Study Deposit.**

The CAISO shall deposit all Interconnection Study Deposits in an interest bearing account at a bank or financial institution designated by the CAISO. The Interconnection Study Deposit shall be applied to pay for prudent costs incurred by the CAISO, the Participating TOs, or third parties at the direction of the CAISO or Participating TOs, as applicable, to perform and administer the Interconnection Studies.

The Interconnection Study Deposits shall be refundable as follows:

- (a) Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under LGIP Section 3.8 on or before thirty (30) calendar days following the Scoping Meeting, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceed the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.
- (b) Should an Interconnection Request made under LGIP Section 3.5.1 be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under LGIP Section 3.8 more than thirty (30) calendar days after the Scoping Meeting, but on or before thirty (30) calendar days following the Results Meeting for the Phase I Interconnection Study, the CAISO shall refund to the Interconnection Customer the difference between (i) the Interconnection Customer's Interconnection Study Deposit and (ii) the greater of the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf or \$100,000, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal.
- (c) Should an Interconnection Request made under LGIP Section 3.5.1.1 be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under LGIP Section 3.8 more than thirty (30) calendar days after the Scoping Meeting, but on or before thirty (30) calendar days following the Results Meeting for the Phase I Interconnection Study, the CAISO shall refund to the Interconnection Customer the difference between (i) the Interconnection Customer's Interconnection Study Deposit and (ii) the greater of the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf or \$50,000, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal.
- (d) Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under LGIP Section 3.8 at any time more than thirty (30) calendar days after the Results Meeting for the Phase I Interconnection Study, the Interconnection Study Deposit shall be non-refundable.
- (e) Upon execution of an LGIA by an Interconnection Customer, the CAISO and the applicable Participating TOs, or the approval by FERC of an unexecuted LGIA, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceeds the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.



Notwithstanding the foregoing, an Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request during an Interconnection Study Cycle shall be obligated to pay to the CAISO all costs in excess of the Interconnection Study Deposit that have been prudently incurred or irrevocably have been committed to be incurred with respect to that Interconnection Request prior to withdrawal. The CAISO will reimburse the applicable Participating TO(s) or third parties, as applicable, for all work performed on behalf of the withdrawn Interconnection Request at the CAISO's direction. The Interconnection Customer must pay all monies due before it is allowed to obtain any Interconnection Study data or results.

All non-refundable portions of the Interconnection Study Deposit that exceed the costs the CAISO, Participating TOs, or third parties have incurred on the Interconnection Customer's behalf shall be treated in accordance with CAISO Tariff Section 37.9.4.

### **3.5.1.3 Obligation for Study Costs.**

Except as otherwise provided in LGIP Section 3.5.1.2, the CAISO shall charge and the Interconnection Customer(s) shall pay the actual costs of the Interconnection Studies. Where an Interconnection Study is performed by means of a Group Study, the cost of the Group Study will be charged pro rata to each Interconnection Request assigned to the Group Study. The cost of Interconnection Studies performed for an individual Interconnection Request, not part of a Group Study, will be charged solely to the Interconnection Customer that submitted the Interconnection Request.

The CAISO shall issue invoices for Interconnection Studies that shall include a detailed and itemized accounting of the cost of each Interconnection Study. The CAISO shall draw from the Interconnection Study Deposit any undisputed costs within thirty (30) calendar days of issuance of an invoice. Whenever the actual cost of performing the Interconnection Studies exceeds the Interconnection Study Deposit, the Interconnection Customer shall pay the undisputed difference in accordance with the CAISO issued invoice within thirty (30) calendar days. The CAISO shall not be obligated to continue to have any studies conducted unless the Interconnection Customer has paid all undisputed amounts in compliance herewith. In the event an Interconnection Study, or portions thereof, is performed by the CAISO, the Interconnection Customer shall pay only the costs of those activities performed by the Participating TO to adequately review or validate that Interconnection Study or portions thereof.

### **3.5.1.4 Use of Site Exclusivity Deposit.**

The CAISO shall deposit all Site Exclusivity Deposits in an interest bearing account at a bank or financial institution designated by the CAISO. The Site Exclusivity Deposit shall be refundable to the Interconnection Customer at any time upon demonstration of Site Exclusivity or the Interconnection Request is withdrawn by the Interconnection Customer or deemed withdrawn by the CAISO by written notice under LGIP Section 3.8. The refund of the Site Exclusivity Deposit shall include interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal. The Site Exclusivity Deposit shall continue to be required after the Interconnection Customer either executes an LGIA or requests the filing of an unexecuted LGIA under LGIP Section 11 if Site Exclusivity has not been demonstrated.

### **3.5.1.5 Proposed Commercial Operation Date.**

The proposed Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility shall not exceed seven years from the date the Interconnection Request is received by the CAISO, unless the

Interconnection Customer demonstrates, and the applicable Participating TO(s) and the CAISO agree, such agreement not to be unreasonably withheld, that engineering, permitting and construction of the new Large Generating Facility or increase in capacity of the existing Generating Facility will take longer than the seven year period.

### **3.5.2 Validation of Interconnection Request.**

#### **3.5.2.1 Acknowledgment of Interconnection Request.**

The CAISO shall notify the Interconnection Customer within six (6) Business Days of receipt of the Interconnection Request, which notice shall state whether the Interconnection Request is deemed valid.

#### **3.5.2.2 Deficiencies in Interconnection Request.**

An Interconnection Request will not be considered to be a valid request until all items in LGIP Section 3.5.1 have been received and deemed valid by the CAISO. If an Interconnection Request fails to meet the requirements set forth in LGIP Section 3.5.1, the CAISO shall include in its notification to the Interconnection Customer under LGIP Section 3.5.2.1 the reasons for such failure and that the Interconnection Request does not constitute a valid request. The Interconnection Customer shall provide the CAISO the additional requested information needed to constitute a valid request. Whenever additional requested information is provided by the Interconnection Customer, the CAISO shall notify the Interconnection Customer within three (3) Business Days of receipt of the additional requested information whether the Interconnection Request is valid. If the Interconnection Request continues to fail to meet the requirements set forth in LGIP Section 3.5.1, the CAISO shall include in its notification to the Interconnection Customer the reasons for such failure. If an Interconnection Request has not been deemed valid, the Interconnection Customer must submit all information necessary to meet the requirements of LGIP Section 3.5.1 no later than twenty (20) calendar days after the close of the applicable Queue Cluster Window or ten (10) calendar days after the CAISO first provided notice that the Interconnection Request was not valid, whichever is later. Interconnection Requests that have not met the requirements of LGIP Section 3.5.1 within twenty (20) calendar days after the close of the applicable Queue Cluster Window or ten (10) calendar days after the CAISO first provided notice that the Interconnection Request was not valid, whichever is later, will not be included in Interconnection Study Cycle and will be deemed invalid.

Interconnection Requests deemed invalid under this LGIP Section 3.5.2.2 are not subject to LGIP Section 3.8. Interconnection Customers with invalid Interconnection Request under this LGIP Section 3.5.2.2 may seek relief under LGIP Section 13.5 by so notifying the CAISO within two (2) Business Days of the notice of invalidity.

### **3.6 Internet Posting.**

The CAISO will maintain on the CAISO Website a list of all Interconnection Requests. The list will identify, for each Interconnection Request: (i) the maximum summer and winter megawatt electrical output; (ii) the location by county and state; (iii) the station or transmission line or lines where the interconnection will be made; (iv) the most recent projected Commercial Operation Date; (v) the status of the Interconnection Request, including whether it is active or withdrawn; (vi) the availability of any studies related to the Interconnection Request; (vii) the date of the Interconnection Request; (viii) the type of Generating Facility to be constructed (e.g., combined cycle, combustion turbine, wind turbine, and fuel type); and (ix) requested deliverability status.

Except in the case of an Affiliate, the list will not disclose the identity of the Interconnection Customer until the Interconnection Customer executes an LGIA or requests that the applicable Participating TO(s) and the CAISO file an unexecuted LGIA with FERC. The CAISO shall post on the CAISO Website an advance notice whenever a Scoping Meeting will be held with an Affiliate of a Participating TO.

The CAISO shall post to the CAISO Website any deviations from the study timelines set forth herein. The CAISO shall further post to the CAISO Website non-confidential portions of the Phase I Interconnection Study following the final Results Meeting and non-confidential portions of the Phase II Interconnection Study no later than publication of the final Transmission Plan under CAISO Tariff Section 24.2.5.2 in Appendix EE.

### **3.7 Coordination with Affected Systems.**

The CAISO will notify the Affected System Operators that are potentially affected by the Interconnection Customer's Interconnection Request or Group Study within which the Interconnection Customer's Interconnection Request will be studied. The CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System Operators, to the extent possible, and, if possible, the CAISO will include those results (if available) in its applicable Interconnection Study within the time frame specified in this LGIP. The CAISO will include such Affected System Operators in all meetings held with the Interconnection Customer as required by this LGIP. The Interconnection Customer will cooperate with the CAISO in all matters related to the conduct of studies and the determination of modifications to Affected Systems, including signing separate study agreements with Affected System owners and paying for necessary studies. An entity which may be an Affected System shall cooperate with the CAISO in all matters related to the conduct of studies and the determination of modifications to Affected Systems.

### **3.8 Withdrawal.**

The Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to the CAISO, and the CAISO will notify the applicable Participating TO(s) and Affected System Operators, if any, within three (3) Business Days of receipt of such a notice. In addition, after confirmation by the CAISO of a valid Interconnection Request under LGIP Section 3.5.2, if the Interconnection Customer fails to adhere to all requirements of this LGIP, except as provided in LGIP Section 13.5 (Disputes), the CAISO shall deem the Interconnection Request to be withdrawn and shall provide written notice to the Interconnection Customer within five (5) Business Days of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Upon receipt of such written notice, the Interconnection Customer shall have five (5) Business Days in which to respond with information or action that either cures the deficiency or supports its position that the deemed withdrawal was erroneous and notifies the CAISO of its intent to pursue Dispute Resolution.

Withdrawal shall result in the removal of the Interconnection Request from the Interconnection Study Cycle. If an Interconnection Customer disputes the withdrawal and removal from the Interconnection Study Cycle and has elected to pursue Dispute Resolution, the Interconnection Customer's Interconnection Request will not be considered in any ongoing Interconnection Study during the Dispute Resolution process.

In the event of such withdrawal, the CAISO, subject to the provisions of LGIP Sections 13.1 and 3.5.1.2, shall provide, at the Interconnection Customer's request, all information that the CAISO developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.

### **3.9 Transferability of Interconnection Request.**

An Interconnection Customer may transfer its Interconnection Request to another entity only if such entity acquires the specific Generating Facility identified in the Interconnection Request and the Point of Interconnection does not change.

### **Section 4 Large Generator Interconnection Study Process Agreement.**

Within thirty (30) calendar days of the close of the Queue Cluster Window, the CAISO shall provide to each Interconnection Customer with a valid Interconnection Request received during the Queue Cluster Window a *pro forma* Large Generator Interconnection Study Process Agreement in the form set forth in Appendix 3 of this LGIP. The *pro forma* Large Generator Interconnection Study Process Agreement shall specify that the Interconnection Customer is responsible for the actual cost of the Interconnection Studies, including reasonable administrative costs, and all requirements of this LGIP. Within three (3) Business Days following the Scoping Meeting, the Interconnection Customer shall specify for inclusion in the attachment to the Large Generator Interconnection Study Process Agreement the Point of Interconnection for the Phase I Interconnection Study. Within ten (10) Business Days following the CAISO's receipt of such designation, the CAISO, in coordination with the applicable Participating TOs, shall provide to the Interconnection Customer a signed Large Generator Interconnection Study Process Agreement. The Interconnection Customer shall execute and deliver to the CAISO the Large Generator Interconnection Study Process Agreement no later than thirty (30) calendar days after the Scoping Meeting.

### **Section 5 Scoping Meeting.**

Within five (5) Business Days after the CAISO notifies the Interconnection Customer of a valid Interconnection Request, the CAISO shall establish a date agreeable to the Interconnection Customer and the applicable Participating TO(s) for the Scoping Meeting. All Scoping Meetings shall occur no later than sixty (60) calendar days after the close of the Queue Cluster Window, unless otherwise mutually agreed upon by the Parties. The CAISO shall determine whether the Interconnection Request is at or near the boundary of an affected Participating TO(s) PTO Service Territory or of any other Affected System(s) so as to potentially affect such third parties. If such a determination is made, the CAISO shall invite the affected Participating TO(s), and/or Affected System Operator(s) in accordance with LGIP Section 3.7, to the Scoping Meeting by informing such third parties of the time and place of the scheduled Scoping Meeting as soon as practicable.

The purpose of the Scoping Meeting shall be to discuss reasonable Commercial Operation Dates and alternative interconnection options, to exchange information including any transmission data that would reasonably be expected to impact such interconnection options, to analyze such information and to determine the potential feasible Points of Interconnection and eliminate alternatives given resources and available information. The applicable Participating TO(s) and the CAISO will bring to the meeting, as reasonably necessary to accomplish its purpose, the following: (a) such already available technical data, including, but not limited to, (i) general facility loadings, (ii) general instability issues, (iii) general short circuit issues, (iv) general voltage issues, and (v) general reliability issues, and (b) general information regarding the number, location, and capacity of other Interconnection Requests in the Interconnection Study Cycle that may potentially form a Group Study with the Interconnection Customer's Interconnection Request.

The Interconnection Customer will bring to the Scoping Meeting, in addition to the technical data in Attachment A to LGIP Appendix 1, any system studies previously performed. The applicable Participating TO(s), the CAISO and the Interconnection

Customer will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. On the basis of the meeting, the Interconnection Customer shall designate its Point of Interconnection. The duration of the meeting shall be sufficient to accomplish its purpose.

The CAISO shall prepare minutes from the meeting, verified by the Interconnection Customer and the other attendees, that will include, at a minimum, discussions among the applicable Participating TO(s) and the CAISO of the expected results and a good faith estimate of the costs for the Phase I Interconnection Study.

## **Section 6 Interconnection Studies.**

### **6.1 Grouping Interconnection Requests.**

At the CAISO's option, and in coordination with the applicable Participating TO(s), an Interconnection Request received during a particular Queue Cluster Window may be studied individually or in a Group Study for the purpose of conducting one or more of the analyses forming the Interconnection Studies. For each Interconnection Study within an Interconnection Study Cycle, the CAISO may develop one or more Group Studies. A Group Study will include, at the CAISO's sole judgment after coordination with the applicable Participating TO(s), Interconnection Requests that electrically affect one another with respect to the analysis being performed without regard to the nature of the underlying Interconnection Service. The CAISO may also, in its sole judgment after coordination with the applicable Participating TO(s), conduct an Interconnection Study for an Interconnection Request separately to the extent warranted by Good Utility Practice based upon the electrical remoteness of the proposed Large Generating Facility from other Large Generating Facilities with Interconnection Requests in the same Queue Cluster Window.

An Interconnection Request's inclusion in a Group Study will not relieve the CAISO or Participating TO(s) from meeting the timelines for conducting the Phase I Interconnection Study provided in the LGIP. Group Studies shall be conducted in such a manner to ensure the efficient implementation of the applicable regional transmission expansion plan in light of the transmission system's capabilities at the time of each study.

### **6.2 Scope and Purpose of Phase I Interconnection Study.**

The Phase I Interconnection Study shall (i) evaluate the impact of all Interconnection Requests received during the Queue Cluster Window on the CAISO Controlled Grid, (ii) preliminarily identify all Network Upgrades needed to address the impacts on the CAISO Controlled Grid of the Interconnection Requests, (iii) preliminarily identify for each Interconnection Request required Interconnection Facilities, (iv) assess the Point of Interconnection selected by each Interconnection Customer and potential alternatives to evaluate potential efficiencies in overall transmission upgrades costs, (v) establish the maximum cost responsibility for Network Upgrades assigned to each Interconnection Request in accordance with LGIP Section 6.3, and (vi) provide a good faith estimate of the cost of Interconnection Facilities for each Interconnection Request.

The Phase I Interconnection Study will consist of a short circuit analysis, a stability analysis to the extent the CAISO and applicable Participating TO(s) reasonably expect transient or voltage stability concerns, a power flow analysis, including off-peak analysis, and an On-Peak and Off-Peak Deliverability Assessment(s), as applicable, in accordance with LGIP Section 6.3.2. The Phase I Interconnection Study will state for each Group Study or Interconnection Request studied individually (i) the assumptions upon which it is based, (ii) the results of the analyses, and (iii) the requirements or potential impediments

to providing the requested Interconnection Service to all Interconnection Requests in a Group Study or to the Interconnection Request studied individually. The Phase I Interconnection Study will provide, without regard to the requested Commercial Operation Dates of the Interconnection Requests, a list of Network Upgrades to the CAISO Controlled Grid that are preliminarily identified as required as a result of the Interconnection Requests in a Group Study or as a result of any Interconnection Request studied individually and Participating TO's Interconnection Facilities associated with each Interconnection Request, and an estimate of any other financial impacts (i.e., on Local Furnishing Bonds).

### **6.3 Identification and Cost Allocation Methods for Network Upgrades in Phase I Interconnection Study.**

#### **6.3.1 Reliability Network Upgrades.**

The CAISO, in coordination with the applicable Participating TO(s), will perform short circuit and stability analyses for each Interconnection Request either individually or as part of a Group Study to preliminarily identify the Reliability Network Upgrades needed to interconnect the Large Generating Facilities to the CAISO Controlled Grid. The CAISO, in coordination with the applicable Participating TO(s), shall also perform power flow analyses, under a variety of system conditions, for each Interconnection Request either individually or as part of a Group Study to identify Reliability Criteria violations, including applicable thermal overloads, that must be mitigated by Reliability Network Upgrades.

The cost of all Reliability Network Upgrades identified in the Phase I Interconnection Study shall be estimated in accordance with LGIP Section 6.4. The estimated costs of Reliability Network Upgrades identified as a result of an Interconnection Request studied separately shall be assigned solely to that Interconnection Request. The estimated costs of Reliability Network Upgrades identified through a Group Study shall be assigned to all Interconnection Requests in that Group Study pro rata on the basis of the maximum megawatt electrical output of each proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed by the Interconnection Customer in its Interconnection Request.

#### **6.3.2 Delivery Network Upgrades.**

##### **6.3.2.1 The On-Peak Deliverability Assessment.**

The CAISO, in coordination with the applicable Participating TO(s), shall perform an On-Peak Deliverability Assessment for Interconnection Customers selecting Full Capacity Deliverability Status in their Interconnection Requests. The On-Peak Deliverability Assessment shall determine the Interconnection Customer's Large Generating Facility's ability to deliver its Energy to the CAISO Controlled Grid under peak load conditions, and identify preliminary Delivery Network Upgrades required to provide the Large Generating Facility with Full Capacity Deliverability Status. The preliminary Delivery Network Upgrades identified by the On-Peak Deliverability Assessment will be used to establish the maximum cost responsibility for Delivery Network Upgrades for each Interconnection Customer selecting Full Capacity Deliverability Status. Deliverability of a new Large Generating Facility will be assessed on the same basis as all other existing resources interconnected to the CAISO Controlled Grid.

The On-Peak Deliverability Assessment will identify the Network Upgrades that are required to enable the Large Generating Facility of each Interconnection Customer requesting Full Capacity Deliverability Status to meet the requirements for deliverability. Deliverability requires that the Generating Facility Capacity, as set forth in the Interconnection Request, can be delivered to the aggregate of Load on the CAISO

Controlled Grid, consistent with Reliability Criteria, under CAISO Controlled Grid peak load and Contingency conditions, and assuming the aggregate output of existing Generating Facilities with established Net Qualifying Capacity values and other Large Generating Facilities in the Interconnection Study Cycle seeking Full Capacity Deliverability Status identified within the On-Peak Deliverability Assessment based on the effect of transmission Constraints.

The On-Peak Deliverability Assessment will further perform an analysis to estimate the MW of deliverable generation capacity for the individual or Group Study if the highest cost Delivery Network Upgrade component were removed from the preliminary Delivery Network Upgrade plan, or, at the CAISO's sole discretion, if any other identified Delivery Network Upgrade component(s) were removed from the preliminary Delivery Network Upgrade plan. This information is provided to allow Interconnection Customers to address at the Results Meeting potential modifications under LGIP Section 6.7.2 or change the Interconnection Request's Full Capacity Deliverability Status for purposes of financing under LGIP Section 12.3.1.

The methodology for the On-Peak Deliverability Assessment will be published on the CAISO Website or, when effective, included in a CAISO Business Practice Manual. The On-Peak Deliverability Assessment does not convey any right to deliver electricity to any specific customer or Delivery Point.

The cost of all Delivery Network Upgrades identified in the On-Peak Deliverability Assessment as part of a Phase I Interconnection Study shall be estimated in accordance with LGIP Section 6.4. The estimated costs of Delivery Network Upgrades identified in the On-Peak Deliverability Assessment shall be assigned to all Interconnection Requests selecting Full Capacity Deliverability Status based on the flow impact of each such Large Generating Facility on the Delivery Network Upgrades as determined by the Generation distribution factor methodology set forth in the On-Peak Deliverability Assessment methodology.

#### **6.3.2.2 Off-Peak Deliverability Assessment.**

The CAISO, in coordination with the applicable Participating TO(s), shall perform an Off-Peak Deliverability Assessment for Interconnection Customers selecting Full Capacity Deliverability Status in their Interconnection Requests to determine Delivery Network Upgrades in addition to those identified in the On-Peak Deliverability Assessment, if any, for a Group Study or individual Phase I Interconnection Study that includes one or more Location Constrained Resource Interconnection Generators (LCRIG), where the fuel source or source of energy for the LCRIG substantially occurs during off-peak conditions. Delivery Network Upgrades will be identified under this Section to ensure that the full maximum megawatt electrical output of each proposed new LCRIG or the amount of megawatt increase in the generating capacity of each existing LCRIG as listed by the Interconnection Customer in its Interconnection Request, whether studied individually or as a Group Study, is deliverable to the aggregate of Load on the CAISO Controlled Grid under the Generation dispatch conditions studied. The methodology for the Off-Peak Deliverability Assessment will be published on the CAISO Website or, if applicable, included in a CAISO Business Practice Manual.

At the CAISO's discretion, an additional Off-Peak Deliverability Assessment may be performed to estimate the MW of deliverable generation capacity from the LCRIG studied individually or from the Group Study if the highest cost, or any other, Delivery Network Upgrade component were removed from the preliminary Delivery Network Upgrade plan. This information is provided to allow Interconnection Customers to address at the Results Meeting potential modifications under LGIP Section 6.7.2 or change the Interconnection

Request's Full Capacity Deliverability Status for purposes of financing under LGIP Section 12.3.1.

The cost of all Delivery Network Upgrades identified in the Off-Peak Deliverability Assessment as part of Phase I Interconnection Study shall be estimated in accordance with LGIP Section 6.4. The estimated costs of Delivery Network Upgrades identified in the Off-Peak Deliverability Assessment shall be assigned to each Interconnection Request included in the Group Study or studied individually based on the flow impact of each such LCRIG on the Delivery Network Upgrades as determined by the Generation distribution factor methodology set forth in the Off-Peak Deliverability Assessment methodology.

#### **6.4 Use of Per Unit Costs to Estimate Network Upgrade Costs.**

Prior to the commencement of the initial Queue Cluster Window for each calendar year, each Participating TO, under the direction of the CAISO, shall publish per unit costs for facilities generally required to interconnect Generation to their respective systems. These per unit costs shall reflect the anticipated cost of procuring and installing such facilities during the current Interconnection Study Cycle, and may vary among Participating TOs and within a PTO Service Territory based on geographic and other cost input differences, and should include an annual adjustment for the following ten (10) years to account for the anticipated timing of procurement to accommodate a potential range of Commercial Operation Dates of Interconnection Requests in the Interconnection Study Cycle. The per unit costs will be used to develop the cost of Reliability Network Upgrades, Delivery Network Upgrades and Participating TO's Interconnection Facilities under this LGIP Section 6.

Prior to adoption and publication of final per unit costs for use in the Interconnection Study Cycle, the CAISO shall publish to the CAISO Website draft per unit costs, including non-confidential information regarding the bases therefore, hold a stakeholder meeting to address the draft per unit costs, and permit stakeholders to provide comments on the draft per unit costs.

#### **6.5 Phase I Interconnection Study Costs Form the Basis of Interconnection Financial Security.**

The costs assigned to Interconnection Customers for Network Upgrades under this Section 6 of the LGIP shall establish the maximum value for the Interconnection Financial Security required from each Interconnection Customer under LGIP Section 9 for such Network Upgrades. In contrast, the costs assigned to Interconnection Customers for Participating TO's Interconnection Facilities under this Section 6 of the LGIP are estimates only that establish the basis for the initial Interconnection Financial Security required from each Interconnection Customer under LGIP Section 9.2.

#### **6.6 Phase I Interconnection Study Procedures.**

The CAISO shall coordinate the Phase I Interconnection Study with applicable Participating TO(s) pursuant to LGIP Section 3.2 and any Affected System that is affected by the Interconnection Request pursuant to LGIP Section 3.7. Existing studies shall be used to the extent practicable when conducting the Phase I Interconnection Study. The CAISO will coordinate Base Case development with the applicable Participating TOs to ensure the Base Cases are accurately developed. The CAISO shall use Reasonable Efforts to complete and publish to Interconnection Customers the Phase I Interconnection Study report at a maximum within two hundred seventy (270) calendar days after the close of the Queue Cluster Window and approximately one hundred eighty calendar days after the final Scoping Meeting held for the Interconnection Study Cycle; however, each individual study or Group Studies may be completed prior to this



maximum time where practicable based on factors, including, but not limited to, the number of Interconnection Requests in the Queue Cluster Window, study complexity, and reasonable availability of subcontractors as provided under LGIP Section 13.2. The CAISO will share applicable study results with the applicable Participating TO(s) for review and comment and will incorporate comments into the study report. The CAISO will issue a final Phase I Interconnection Study report to the Interconnection Customer. At the time of completion of the Phase I Interconnection Study, the CAISO may, at the Interconnection Customer's request, determine whether the provisions of LGIP Section 7.6 apply.

At any time the CAISO determines that it will not meet the required time frame for completing the Phase I Interconnection Study due to the large number of Interconnection Requests in the Queue Cluster Window, study complexity, or unavailability of subcontractors on a reasonable basis to perform the study in the required time frame, the CAISO shall notify the Interconnection Customers as to the schedule status of the Phase I Interconnection Study and provide an estimated completion date with an explanation of the reasons why additional time is required.

Upon request, the CAISO shall provide the Interconnection Customer all supporting documentation, workpapers and relevant pre-Interconnection Request and post-Interconnection Request power flow, short circuit and stability databases for the Phase I Interconnection Study, subject to confidentiality arrangements consistent with LGIP Section 13.1.

## **6.7 Phase I Interconnection Study Results Meeting.**

Within thirty (30) calendar days of providing the Phase I Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s), the CAISO and the Interconnection Customer shall hold a Results Meeting to discuss the results of the Phase I Interconnection Study, including assigned cost responsibility.

### **6.7.1 Commercial Operation Date.**

At the Results Meeting, the Interconnection Customer shall provide a schedule outlining key milestones including environmental survey start date, expected environmental permitting submittal date, expected procurement date of project equipment, back-feed date for project construction, and expected project construction date. This will assist the parties in determining if Commercial Operation Dates are reasonable. If major Interconnection Customer's Interconnection Facilities for the Large Generating Facility have been identified in the Phase I Interconnection Study, such as telecommunications equipment to support a possible special protection system (SPS), distribution feeders to support back feed, new substation, and/or expanded substation work, permitting and material procurement lead times may result in the need to alter the proposed Commercial Operation Date. The Parties may agree to a new Commercial Operation Date. In addition, where an Interconnection Customer intends to establish Commercial Operation separately for different Electric Generating Units or project phases at its Generating Facility, it may only do so in accordance with an implementation plan agreed to in advance by the CAISO and Participating TO, which agreement shall not be unreasonably withheld. Where the parties cannot agree, the Commercial Operation Date determined reasonable by the CAISO, in coordination with the applicable Participating TO(s), will be used for the Phase II Interconnection Study where the changed Commercial Operation Date is needed to accommodate the anticipated completion, assuming Reasonable Efforts by the applicable Participating TO(s), of necessary Reliability Network Upgrades and/or Participating TO's Interconnection Facilities, pending the outcome of any relief sought by the Interconnection Customer under LGIP Section 13.5. The Interconnection

Customer must notify the CAISO within five (5) Business Days following the Results Meeting that it is initiating dispute procedures under LGIP Section 13.5.

## **6.7.2 Modifications.**

At the Results Meeting, the Interconnection Customer should be prepared to discuss any desired modifications to the Interconnection Request. Within five (5) Business Days following the Results Meeting, the Interconnection Customer shall submit to the CAISO, in writing, modifications to any information provided in the Interconnection Request. The CAISO will forward the Interconnection Customer's modification to the applicable Participating TO(s) within one (1) Business Day of receipt. The Interconnection Customer shall remain eligible for the Phase II Interconnection Study if the modifications are in accordance with LGIP Sections 6.7.2.1 or 6.7.2.2.

Notwithstanding the above, during the course of the Interconnection Studies, the Interconnection Customer, the applicable Participating TO(s), or the CAISO may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes are acceptable to the applicable Participating TO(s), the CAISO, and Interconnection Customer, such acceptance not to be unreasonably withheld, the CAISO shall modify the Point of Interconnection and/or configuration in accordance with such changes without altering the Interconnection Request's eligibility for participating in Interconnection Studies.

**6.7.2.1** Modifications permitted under this Section 6.7.2 shall include specifically: (a) a decrease in the electrical output (MW) of the proposed project; (b) modifying the technical parameters associated with the Large Generating Facility technology or the Large Generating Facility step-up transformer impedance characteristics; and (c) modifying the interconnection configuration.

**6.7.2.2** For any modification other than those specifically permitted by LGIP Section 6.7.2.1, the Interconnection Customer may first request that the CAISO evaluate whether such modification is a Material Modification. In response to the Interconnection Customer's request, the CAISO, in coordination with the affected Participating TO(s) and, if applicable, any Affected System Operator, shall evaluate the proposed modifications prior to making them and the CAISO shall inform the Interconnection Customer in writing of whether the modifications would constitute a Material Modification. Any change to the Point of Interconnection, except for that specified by the CAISO in an Interconnection Study or otherwise allowed under this LGIP Section 6.7.2, shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

## **Section 7 Phase II Interconnection Study.**

### **7.1 Scope of Phase II Interconnection Study.**

The CAISO, in coordination with the applicable Participating TO(s), will conduct a Phase II Interconnection Study that will incorporate eligible Interconnection Requests from the previous two Phase I Interconnection Studies. The Phase II Interconnection Study shall (i) update, as necessary, analyses performed in the Phase I Interconnection Studies to account for the withdrawal of Interconnection Requests, (ii) identify final Reliability Network Upgrades needed to physically interconnect the Large Generating Facilities, (iii) assign responsibility for financing the identified final Reliability Network Upgrades, (iv) identify, following coordination with the CAISO's Transmission Planning Process, final Delivery Network Upgrades needed to interconnect those Large Generating Facilities

selecting Full Capacity Deliverability Status, (v) assign responsibility for financing Delivery Network Upgrades needed to interconnect those Large Generating Facilities selecting Full Capacity Deliverability Status, (vi) identify for each Interconnection Request final Point of Interconnection and Participating TO's Interconnection Facilities and Interconnection Customer's Interconnection Facilities, (vii) provide a +/-20% estimate for each Interconnection Request of the final Participating TO's Interconnection Facilities and Interconnection Customer's Interconnection Facilities, and (viii) optimize in-service timing requirements based on operational studies in order to maximize achievement of the Commercial Operation Dates of the Large Generating Facilities.

With respect to the foregoing items, the Phase II Interconnection Study shall specify and estimate the cost of the equipment, engineering, procurement and construction work, including the financial impacts (i.e., on Local Furnishing Bonds), if any, and schedule for effecting remedial measures that address such financial impacts, needed on the CAISO Controlled Grid to implement the conclusions of the updated Phase II Interconnection Study technical analyses in accordance with Good Utility Practice to physically and electrically connect the Interconnection Customer's Interconnection Facilities to the CAISO Controlled Grid. The Phase II Interconnection Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Participating TO's Interconnection Facilities and Network Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities.

## **7.2 Coordination of the Phase II Interconnection Study with the Transmission Planning Process.**

The CAISO shall coordinate the Phase II Interconnection Studies with the CAISO's Transmission Planning Process under, and as defined in, CAISO Tariff Section 24 in Appendix EE. This coordination shall include, but not be limited to:

- (i) consistency, to the maximum extent applicable under Good Utility Practice, between the Interconnection Base Case Data used for performance of the Phase II Interconnection Studies and the Unified Planning Assumptions developed for the Transmission Planning Process, including, but not limited to, data relating to Demand data, network topology, and generation resources;
- (ii) consideration of any conceptual transmission plan(s) developed, but not rejected, in the current or former Transmission Planning Processes intended to access generation development areas as a means to satisfy the Network Upgrade requirements to interconnect Generating Facilities included in the Phase II Interconnection Study;
- (iii) performance of sensitivities within the Transmission Planning Process, including cases considering Generating Facilities included in the Phase II Interconnection Study(ies) to the extent possible, to optimize transmission upgrades developed in the current Transmission Planning Process to achieve System Reliability, economic efficiency, and satisfy the Network Upgrade requirements to interconnect Generating Facilities included in the Phase II Interconnection Study;
- (iv) consideration of future generation development potential in transmission upgrade designs pursuant to criteria developed as part of the Unified Planning Assumptions; and
- (v) consideration of phased development and option value of transmission projects to address uncertainty.

Network Upgrades, apart from detail engineering and final cost determinations, identified in any Phase II Interconnection Study or as part of the Transmission Planning Process that must receive ISO Governing Board approval under Section 24 in Appendix EE of the CAISO Tariff may be subject to Section 24.2.5.2 in Appendix EE of the CAISO Tariff.

Generation projects entering the Phase II Interconnection Study will also be considered in the Unified Planning Assumptions (as defined in CAISO Tariff Appendix EE), as appropriate. Transmission projects proposed through the Phase II Interconnection Study that require CAISO Governing Board approval will be integrated into the stakeholder process under the Transmission Planning Process.

### **7.3 Financing of Reliability Network Upgrades.**

The responsibility to finance final Reliability Network Upgrades identified in the Phase II Interconnection Study of an Interconnection Request studied separately shall be assigned solely to that Interconnection Request up to the cost assignment for Reliability Network Upgrades under LGIP Section 6.3.1. The responsibility to finance final Reliability Network Upgrades identified through a Group Study in the Phase II Interconnection Study shall be assigned to all Interconnection Requests in that Group Study pro rata on the basis of the maximum megawatt electrical output of each proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed by the Interconnection Customer in its Interconnection Request up to the cost assignment for Reliability Network Upgrades under LGIP Section 6.3.1.

### **7.4 Financing of Delivery Network Upgrades.**

The responsibility to finance all Delivery Network Upgrades identified in the On-Peak Deliverability Assessment and Off-Peak Deliverability Assessment as part of Phase II Interconnection Study shall be assigned to all Interconnection Requests selecting Full Capacity Deliverability Status based on the flow impact of each such Large Generating Facility on each Delivery Network Upgrade as determined by the Generation distribution factor methodology set forth in the On-Peak and Off-Peak Deliverability Assessment methodologies. The financing responsibility shall be up to, but no greater than, the cost assignment for Delivery Network Upgrades for each Interconnection Request under LGIP Sections 6.3.2.1 and 6.3.2.2.

### **7.5 Phase II Interconnection Study Procedures.**

The CAISO shall coordinate the Phase II Interconnection Study with applicable Participating TO(s) and any Affected System that is affected by the Interconnection Request pursuant to LGIP Section 3.7. Existing studies shall be used to the extent practicable when conducting the Phase II Interconnection Study. The CAISO will coordinate Base Case development with the applicable Participating TOs to ensure the Base Cases are accurately developed. The CAISO shall use Reasonable Efforts to complete and publish to Interconnection Customers the Phase II Interconnection Study report within three hundred thirty (330) calendar days from January 1 of each calendar year. The CAISO will share applicable study results with the applicable Participating TO(s), for review and comment, and will incorporate comments into the study report. The CAISO will issue a final Phase II Interconnection Study report to the Interconnection Customer.

At the request of the Interconnection Customer or at any time the CAISO determines that it will not meet the required time frame for completing the Phase II Interconnection Study, the CAISO shall notify the Interconnection Customer as to the schedule status of the

Phase II Interconnection Study and provide an estimated completion date with an explanation of the reasons why additional time is required.

Upon request, the CAISO shall provide the Interconnection Customer all supporting documentation, workpapers and relevant pre-Interconnection Request and post-Interconnection Request power flow, short circuit and stability databases for the Phase II Interconnection Study, subject to confidentiality arrangements consistent with LGIP Section 13.1.

#### **7.6. Accelerated Phase II Interconnection Study Process.**

The Phase II Interconnection Study shall be completed within one hundred fifty (150) calendar days following the posting of the initial Interconnection Financial Security under LGIP Section 9 where the Interconnection Request meets the following criteria: (i) the Interconnection Request was not grouped with any other Interconnection Requests during the Phase I Interconnection Study or was identified as interconnecting to a point of available transmission during the Phase I Interconnection Study, and (ii) the Interconnection Customer is able to demonstrate that the general Phase II Interconnection Study timeline under LGIP Section 7.5 is not sufficient to accommodate the Commercial Operation Date of the Large Generating Facility.

In addition to the above criteria, the CAISO may apply to FERC in coordination with the Interconnection Customer for a waiver of the timelines in this LGIP to meet the schedule required by an order, ruling, or regulation of the Governor of the State of California, the CPUC, or the CEC.

#### **7.7 Meeting with the CAISO and Applicable Participating TO(s).**

Within thirty (30) calendar days of providing the final Phase II Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s), the CAISO and the Interconnection Customer shall meet to discuss the results of the Phase II Interconnection Study, including selection of the final Commercial Operation Date.

#### **Section 8 [NOT USED]**

#### **Section 9 Interconnection Financial Security.**

##### **9.1 Types of Interconnection Financial Security.**

The Interconnection Financial Security posted by an Interconnection Customer may be any combination of the following types of Interconnection Financial Security provided in favor of the applicable Participating TO(s):

- (a) an irrevocable and unconditional letter of credit issued by a bank or financial institution that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's;
- (b) an irrevocable and unconditional surety bond issued by an insurance company that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's;
- (c) an unconditional and irrevocable guaranty issued by a company has a credit rating of A or better by Standard and Poors or A2 or better by Moody's;

- (d) a cash deposit standing to the credit of the CAISO and applicable Participating TO(s) in an interest-bearing escrow account maintained at a bank or financial institution that is reasonably acceptable to the CAISO;
- (e) a certificate of deposit in the name of the CAISO issued by a bank or financial institution that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's; or
- (f) a payment bond certificate in the name of the CAISO issued by a bank or financial institution that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's.

Interconnection Financial Security instruments as listed above shall be in such form as the CAISO and applicable Participating TO(s) may reasonably require from time to time by notice to Interconnection Customers or in such other form as has been evaluated and approved as reasonably acceptable by the CAISO and applicable Participating TO(s). The CAISO shall publish and maintain standardized forms related to the types of Interconnection Financial Security listed above on the CAISO Website. The CAISO shall require the use of standardized forms of Interconnection Financial Security to the greatest extent possible. If at any time the guarantor of the Interconnection Financial Security fails to maintain the credit rating required by this LGIP Section 9.1, the Interconnection Customer shall provide to the CAISO replacement Interconnection Financial Security meeting the requirements of this LGIP Section 9.1 within five (5) Business Days of the change in credit rating.

Interest on a cash deposit standing to the credit of the CAISO in an interest-bearing escrow account under subpart (d) of this LGIP Section 9.1 will accrue to the Interconnection Customer's benefit and will be added to the Interconnection Customer's account on a monthly basis.

## **9.2 Initial Posting of Interconnection Financial Security.**

On or before ninety (90) calendar days after publication of the final Phase I Interconnection Study report, Interconnection Customers must post, with notice to the CAISO, two separate Interconnection Financial Security instruments (i) in the amount of twenty percent (20%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study for Network Upgrades, or \$500,000, whichever is greater, and (ii) in the amount of twenty percent (20%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study for Participating TO's Interconnection Facilities. The failure by an Interconnection Customer to timely post, and notify the CAISO of the posting of, the Interconnection Financial Security required by this LGIP Section 9.2 shall result in the Interconnection Request being deemed withdrawn and subject to LGIP Section 3.8.

## **9.3 Second Posting of Interconnection Financial Security.**

On or before one hundred eighty (180) calendar days after publication of the final Phase II Interconnection Study report or at the start of Construction Activities of Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer, whichever is earlier, the Interconnection Customer must post separate Interconnection Financial Security instruments in the total amount of one hundred percent (100%) of the total cost responsibility assigned to the Interconnection Customer (i) in the final Phase I Interconnection Study for Network Upgrades, if greater than \$500,000, and (ii) in the final Phase II Interconnection Study for Participating TO's Interconnection Facilities. The start date for Construction Activities of Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer must be set

forth in the Interconnection Customer's LGIA if that start date is prior to one hundred eighty (180) calendar days after publication of the final Phase II Interconnection Study report. The failure by an Interconnection Customer to timely post the Interconnection Financial Security required by this LGIP Section 9.2 shall constitute grounds for termination of the LGIA pursuant to LGIA Article 2.3.

#### **9.4 General Effect of Withdrawal of Interconnection Request or Termination of the LGIA on Interconnection Financial Security.**

Except as set forth in LGIP Section 9.4.1, withdrawal of an Interconnection Request or termination of an LGIA shall allow the applicable Participating TO(s) to liquidate the Interconnection Financial Security, or balance thereof, posted by the Interconnection Customer for Network Upgrades at the time of withdrawal. To the extent the amount of the liquidated Interconnection Financial Security plus capital, if any, separately provided by the Interconnection Customer to satisfy its obligation to finance Network Upgrades in accordance with LGIP Section 12.3 exceeds the total cost responsibility for Network Upgrades assigned to the Interconnection Customer by the Phase I Interconnection Study, the applicable Participating TO(s) shall remit to the Interconnection Customer the excess amount.

Withdrawal of an Interconnection Request or termination of an LGIA shall result in the release to the Interconnection Customer of any Interconnection Financial Security posted by the Interconnection Customer for Participating TO's Interconnection Facilities, except with respect to any amounts necessary to pay for costs incurred or irrevocably committed by the applicable Participating TO(s) on behalf of the Interconnection Customer for the Participating TO's Interconnection Facilities and for which the applicable Participating TO(s) has not been reimbursed.

#### **9.4.1 Conditions for Partial Recovery of Interconnection Financial Security Upon Withdrawal of Interconnection Request or Termination of LGIA.**

A portion of the Interconnection Financial Security shall be released to the Interconnection Customer, consistent with LGIP Section 9.4.2, if the withdrawal of the Interconnection Request or termination of the LGIA occurs for any of the following reasons:

- (a) **Failure to Secure a Power Purchase Agreement.** At the time of withdrawal of the Interconnection Request or termination of the LGIA, the Interconnection Customer demonstrates to the CAISO that it has failed to secure an acceptable power purchase agreement for the Energy or capacity of the Large Generating Facility after a good faith effort to do so. A good faith effort can be established by demonstrating participation in a competitive solicitation process or bilateral negotiations with an entity other than an Affiliate that progressed, at minimum, to the mutual exchange by all counter-parties of proposed term sheets.
- (b) **Failure to Secure a Necessary Permit.** At the time of withdrawal of the Interconnection Request or termination of the LGIA, the Interconnection Customer demonstrates to the CAISO that it has received a final denial from the primary issuing Governmental Authority of any permit or other authorization necessary for the construction or operation of the Large Generating Facility.
- (c) **Increase in the Cost of Participating TO's Interconnection Facilities.** The Interconnection Customer withdraws the Interconnection Request or terminates the LGIA based on an increase of more than 30% or \$300,000, whichever is greater, in the estimated cost of Participating TO's Interconnection Facilities

between the Phase I Interconnection Study and the Phase II Interconnection Study.

- (d) **Material Change in Interconnection Customer Interconnection Facilities Created by a CAISO Change in the Point of Interconnection.** The Interconnection Customer withdraws the Interconnection Request or terminates the LGIA based on a material change from the Phase I Interconnection Study in the Point of Interconnection for the Large Generating Facility mandated by the CAISO and included in the final Phase II Interconnection Study. A material change in the Point of Interconnection shall be where Point of Interconnection has moved to (i) a different substation, (ii) a different line on a different right of way, or (iii) a materially different location than previously identified on the same line.

#### **9.4.2 Schedule for Determining Non-Refundable Portion of the Interconnection Financial Security for Network Upgrades.**

##### **9.4.2.1 Up to One Hundred Eighty Days After Final Phase II Interconnection Study Report.**

If, at any time after the initial posting of the Interconnection Financial Security for Network Upgrades under LGIP Section 9.2 and on or before one hundred eighty (180) calendar days after the date of issuance of the final Phase II Interconnection Study report, the Interconnection Customer withdraws the Interconnection Request or terminates the LGIA, as applicable, in accordance with LGIP Section 9.4.1, the applicable Participating TO(s) shall liquidate the Interconnection Financial Security for Network Upgrades under LGIP Section 9.2 and reimburse the Interconnection Customer in an amount of (i) fifty percent (50%) of the value of the posted Interconnection Financial Security for Network Upgrades, or, (ii) if the Interconnection Financial Security has been drawn down to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer, the lesser of the remaining balance of the Interconnection Financial Security or the amount calculated under (i) above. If the Interconnection Customer has separately provided capital apart from the Interconnection Financial Security to finance Pre-Construction Activities for Network Upgrades, the applicable Participating TO(s) will credit the capital provided as if drawn from the Interconnection Financial Security and apply (ii) above.

##### **9.4.2.2 Between One Hundred Eighty-One Days and Three Hundred Sixty-Five Days After Final Phase II Interconnection Study Report.**

If, at any time between one hundred eighty-one (181) calendar days and three hundred sixty-five (365) calendar days after the date of issuance of the final Phase II Interconnection Study report, the Interconnection Customer withdraws the Interconnection Request or terminates the LGIA, as applicable, in accordance with LGIP Section 9.4.1, the applicable Participating TO(s) shall liquidate the Interconnection Financial Security for Network Upgrades under LGIP Section 9.3 and reimburse the Interconnection Customer in an amount of (i) fifty percent (50%) of the posted value of the Interconnection Financial Security for Network Upgrades, or, (ii) if the Interconnection Financial Security has been drawn down to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer, the lesser of the remaining balance of the Interconnection Financial Security or the amount calculated under (i) above. If the Interconnection Customer has separately provided capital apart from the Interconnection Financial Security to finance Pre-Construction Activities for Network Upgrades, the applicable Participating TO(s) will credit the capital provided as if drawn from the Interconnection Financial Security and apply (ii) above.



**9.4.2.3 Between Three Hundred Sixty-Six Days and Five Hundred Forty-Five Days After Final Phase II Interconnection Study Report.**

If, at any time between three hundred sixty-six (366) calendar days and five hundred forty-five (545) calendar days after the date of issuance of the final Phase II Interconnection Study report, the Interconnection Customer withdraws the Interconnection Request or terminates the LGIA, as applicable, in accordance with LGIP Section 9.4.1, the applicable Participating TO(s) shall liquidate the Interconnection Financial Security for Network Upgrades under LGIP Section 9.3 and reimburse the Interconnection Customer in an amount of (i) twenty percent (20%) of the posted value of the Interconnection Financial Security for Network Upgrades, or, (ii) if the Interconnection Financial Security has been drawn down to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer, the lesser of remaining balance of the Interconnection Financial Security or the amount calculated under (i) above. If the Interconnection Customer has separately provided capital apart from the Interconnection Financial Security to finance Pre-Construction Activities for Network Upgrades, the applicable Participating TO(s) will credit the capital provided as if drawn from the Interconnection Financial Security and apply (ii) above.

**9.4.2.4 Special Treatment Based on Failure to Obtain Necessary Permit or Authorization from Governmental Authority.**

If, at any time after the posting requirement under LGIP Section 9.3, the Interconnection Customer withdraws the Interconnection Request or terminates the LGIA, as applicable, in accordance with LGIP Section 9.4.1(b), and the Delivery Network Upgrades to be financed by the Interconnection Customer under LGIP Section 7.3 are also to be financed by one or more other Interconnection Customers, then LGIP Section 9.4.2.1 shall apply, except that the Interconnection Customer shall not be reimbursed for its share of any actual costs incurred or irrevocably committed by the applicable Participating TO(s) for Construction Activities.

**9.4.2.5 After Commencement of Construction Activities.**

Except as otherwise provided in LGIP Section 9.4.2.4, once Construction Activities on Network Upgrades on behalf of the Interconnection Customer commence, any withdrawal of the Interconnection Request or termination of the LGIA by the Interconnection Customer will be treated in accordance with this LGIP Section 9.4.

**9.4.2.6 Notification to CAISO and Accounting by Applicable Participating TO(s).**

The applicable Participating TO(s) must notify the CAISO within one (1) Business Day of liquidating any Interconnection Financial Security. Within twenty (20) calendar days of any liquidating event, the applicable Participating TO(s) must provide the CAISO and Interconnection Customer with an accounting of the disposition of the proceeds of the liquidated Interconnection Financial Security and remit to the CAISO all proceeds not otherwise reimbursed to the Interconnection Customer or applied to costs incurred or irrevocably committed by the applicable Participating TO(s) on behalf of the Interconnection Customer in accordance with this LGIP Section 9.4. All non-refundable portions of the Interconnection Financial Security remitted to the CAISO in accordance with this LGIP Section 9.4 shall be treated in accordance with CAISO Tariff Section 37.9.4.

**Section 10 Engineering & Procurement (“E&P”) Agreement.**

Prior to executing an LGIA, an Interconnection Customer may, in order to advance the implementation of its interconnection, request and the applicable Participating TO(s) shall offer the Interconnection Customer, an E&P Agreement that authorizes the applicable Participating TO(s) to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. However, the applicable Participating TO(s) shall not be obligated to offer an E&P Agreement if the Interconnection Customer is in Dispute Resolution as a result of an allegation that the Interconnection Customer has failed to meet any milestones or comply with any prerequisites specified in other parts of the LGIP. The E&P Agreement is an optional procedure. The E&P Agreement shall provide for the Interconnection Customer to pay the cost of all activities authorized by the Interconnection Customer and to make advance payments or provide other satisfactory security for such costs.

The Interconnection Customer shall pay the cost of such authorized activities and any cancellation costs for equipment that is already ordered for its interconnection, which cannot be mitigated as hereafter described, whether or not such items or equipment later become unnecessary. If the Interconnection Customer withdraws its application for interconnection or either Party terminates the E&P Agreement, to the extent the equipment ordered can be canceled under reasonable terms, the Interconnection Customer shall be obligated to pay the associated cancellation costs. To the extent that the equipment cannot be reasonably canceled, the applicable Participating TO(s) may elect: (i) to take title to the equipment, in which event the applicable Participating TO(s) shall refund the Interconnection Customer any amounts paid by Interconnection Customer for such equipment and shall pay the cost of delivery of such equipment, or (ii) to transfer title to and deliver such equipment to the Interconnection Customer, in which event the Interconnection Customer shall pay any unpaid balance and cost of delivery of such equipment.

## **Section 11 Large Generator Interconnection Agreement (LGIA).**

### **11.1 Tender.**

**11.1.1** Within fifteen (15) Business Days after the CAISO provides the final Phase II Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s) and the CAISO shall tender a draft LGIA, together with draft appendices. The draft LGIA shall be in the form of the FERC-approved form of LGIA set forth in CAISO Tariff Appendix HH. The Interconnection Customer shall provide written comments, or notification of no comments, to the draft appendices to the applicable Participating TO(s) and the CAISO within (30) calendar days of receipt.

**11.1.2** Consistent with LGIP Sections 13.3 and 11.1.1, when the transmission system of a Participating TO, in which the Point of Interconnection is not located, is affected, such Participating TO shall tender a separate agreement, in the form of the LGIA, as appropriately modified.

### **11.2 Negotiation.**

Notwithstanding LGIP Section 11.1, at the request of the Interconnection Customer, the applicable Participating TO(s) and CAISO shall begin negotiations with the Interconnection Customer concerning the appendices to the LGIA at any time after the CAISO provides the Interconnection Customer with the final Phase II Interconnection Study report. The applicable Participating TO(s) and CAISO and the Interconnection Customer shall negotiate concerning any disputed provisions of the appendices to the draft LGIA for not more than ninety (90) calendar days after the CAISO provides the Interconnection Customer with the final Phase II Interconnection Study report. If the Interconnection Customer determines that negotiations are at an impasse, it may request

termination of the negotiations at any time after tender of the draft LGIA pursuant to LGIP Section 11.1 and request submission of the unexecuted LGIA with FERC or initiate Dispute Resolution procedures pursuant to LGIP Section 13.5. If the Interconnection Customer requests termination of the negotiations, but, within ninety (90) calendar days after issuance of the final Phase II Interconnection Study report, fails to request either the filing of the unexecuted LGIA or initiate Dispute Resolution, it shall be deemed to have withdrawn its Interconnection Request. Unless otherwise agreed by the Parties, if the Interconnection Customer has not executed and returned the LGIA, requested filing of an unexecuted LGIA, or initiated Dispute Resolution procedures pursuant to LGIP Section 13.5 within ninety (90) calendar days after issuance of the final Phase II Interconnection Study report, it shall be deemed to have withdrawn its Interconnection Request. The applicable Participating TO(s) and CAISO shall provide to the Interconnection Customer a final LGIA within fifteen (15) Business Days after the completion of the negotiation process.

### **11.3 Execution and Filing.**

The Interconnection Customer shall either: (i) execute the appropriate number of originals of the tendered LGIA as specified in the directions provided by the CAISO and return them to the CAISO, as directed, for completion of the execution process; or (ii) request in writing that the applicable Participating TO(s) and CAISO file with FERC an LGIA in unexecuted form. The LGIA shall be considered executed as of the date that all three Parties have signed the LGIA. As soon as practicable, but not later than ten (10) Business Days after receiving either the executed originals of the tendered LGIA (if it does not conform with a FERC-approved standard form of interconnection agreement) or the request to file an unexecuted LGIA, the applicable Participating TO(s) and CAISO shall file the LGIA with FERC, as necessary, together with an explanation of any matters as to which the Interconnection Customer and the applicable Participating TO(s) or CAISO disagree and support for the costs that the applicable Participating TO(s) propose to charge to the Interconnection Customer under the LGIA. An unexecuted LGIA should contain terms and conditions deemed appropriate by the applicable Participating TO(s) and CAISO for the Interconnection Request. If the Parties agree to proceed with design, procurement, and construction of facilities and upgrades under the agreed-upon terms of the unexecuted LGIA, they may proceed pending FERC action.

### **11.4 Commencement of Interconnection Activities.**

If the Interconnection Customer executes the final LGIA, the applicable Participating TO(s), CAISO and the Interconnection Customer shall perform their respective obligations in accordance with the terms of the LGIA, subject to modification by FERC. Upon submission of an unexecuted LGIA, the Interconnection Customer, applicable Participating TO(s) and CAISO may proceed to comply with the unexecuted LGIA, pending FERC action.

### **11.5 Interconnection Customer to Meet Requirements of the Participating TO's Interconnection Handbook.**

The Interconnection Customer's Interconnection Facilities shall be designed, constructed, operated and maintained in accordance with the applicable Participating TO's Interconnection Handbook.

## **Section 12 Construction of Participating TO's Interconnection Facilities and Network Upgrades, and Funding of Network Upgrades.**

### **12.1 Schedule.**

The applicable Participating TO(s) and the Interconnection Customer shall negotiate in good faith concerning a schedule for the construction of the applicable Participating TO's Interconnection Facilities and the Network Upgrades.

## **12.2 Construction Sequencing.**

### **12.2.1 General.**

In general, the sequence of construction of Stand Alone Network Upgrades or other Network Upgrades for a single Interconnection Request, or Network Upgrades identified for the interconnection of Generating Facilities associated with multiple Interconnection Requests, shall be determined, to the maximum extent practical, in a manner that accommodates the proposed Commercial Operation Date set forth in the LGIA of the Interconnection Customer(s) associated with the Stand Alone Network Upgrades or other Network Upgrades.

### **12.2.2 Construction of Network Upgrades that are or were an Obligation of an Entity other than the Interconnection Customer.**

The applicable Participating TO(s) shall be responsible for financing and constructing any Network Upgrades necessary to support the interconnection of the Generating Facility of an Interconnection Customer with an LGIA under this LGIP, whenever either:

- (i) the Network Upgrades were included in the Interconnection Base Case Data for a Phase II Interconnection Study on the basis that they were Network Upgrades associated with Generating Facilities of Interconnection Customers that have an executed LGIA (or its equivalent predecessor agreement) or unexecuted LGIA (or its equivalent predecessor agreement) filed with FERC, but the Network Upgrades will not otherwise be completed because such LGIA or equivalent predecessor agreement was subsequently terminated or the Interconnection Request has otherwise been withdrawn; or
- (ii) the Network Upgrades were included in the Interconnection Base Case Data for a Phase II Interconnection Study on the basis that they were Network Upgrades associated with Generating Facilities of Interconnection Customers that have an executed LGIA (or its equivalent predecessor agreement) or unexecuted LGIA (or its equivalent predecessor agreement) filed with FERC, but the Network Upgrades will not otherwise be completed in time to support the Interconnection Customer's In-Service Date because construction has not commenced in accordance with the terms of such LGIA (or its equivalent predecessor agreement).

The obligation under this LGIP Section 12.2.2 arises only after the CAISO, in coordination with the applicable Participating TO(s), determines that the Network Upgrades remain needed to support the interconnection of the Interconnection Customer's Generating Facility notwithstanding, as applicable, the absence or delay of the Generating Facility that is contractually, or was previously contractually, associated with the Network Upgrades.

Further, to the extent the timing of such Network Upgrades was not accounted for in determining a reasonable Commercial Operation Date among the CAISO, applicable Participating TO(s), and the Interconnection Customer as part of the Phase II Interconnection Study, the applicable Participating TO(s) will use Reasonable Efforts to ensure that the construction of such Network Upgrades can accommodate the Interconnection Customer's proposed Commercial Operation Date. If, despite Reasonable Efforts, it is anticipated that the Network Upgrades cannot be constructed in

time to accommodate the Interconnection Customer's proposed Commercial Operation Date, the Interconnection Customer may commit to pay the applicable Participating TO(s) any costs associated with expediting construction of the Network Upgrades to meet the original proposed Commercial Operation Date. The expediting costs under this LGIP Section 12.2.2 shall be in addition to the Interconnection Customer's cost responsibility assigned under LGIP Section 6.3.

### **12.2.3 Advancing Construction of Network Upgrades that are Part of the CAISO's Transmission Plan.**

An Interconnection Customer with an LGIA, in order to maintain its In-Service Date as specified in the LGIA, may request that the CAISO and applicable Participating TO(s) advance to the extent necessary the completion of Network Upgrades that: (i) are necessary to support such In-Service Date and (ii) would otherwise not be completed, pursuant to an approved CAISO Transmission Plan, as defined in Appendix EE, covering the PTO Service Territory of the applicable Participating TO(s), in time to support such In-Service Date. Upon such request, the applicable Participating TO(s) will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay the applicable Participating TO(s) any associated expediting costs. The Interconnection Customer shall be entitled to refunds, if any, in accordance with this LGIP and the LGIA, for any expediting costs paid.

## **12.3 Network Upgrades.**

### **12.3.1 Initial Funding.**

Unless the applicable Participating TO(s) elects to fund the full capital for identified Reliability and Delivery Network Upgrades, they shall be funded by the Interconnection Customer(s) either by means of drawing down the Interconnection Financial Security or by the provision of additional capital, at each Interconnection Customer's election, up to a maximum amount no greater than that established by the cost responsibility assigned to each Interconnection Customer(s) under LGIP Sections 7.3 and 7.4.

Where the applicable Participating TO(s) does not elect to fund the full capital for specific Reliability and Delivery Network Upgrades, the applicable Participating TO(s) shall be responsible for funding any capital costs for the Reliability and Delivery Network Upgrades that exceed the total cost responsibility assigned to the Interconnection Customer(s) under LGIP Sections 7.3 and 7.4.

- (a) Where the funding responsibility for any Reliability Network Upgrade or Delivery Network Upgrade has been assigned to a single Interconnection Customer in accordance with this LGIP, and the applicable Participating TO(s) has elected not to fund the full capital of the Reliability Network Upgrade or Delivery Network Upgrade, the applicable Participating TO(s) shall invoice the Interconnection Customer under LGIA Article 12.1 up to a maximum amount no greater than that established by the cost responsibility assigned to each Interconnection Customer(s) under LGIP Sections 7.3 and 7.4 for the Reliability Network Upgrade or Delivery Network Upgrade, respectively.
- (b) Where the funding responsibility for a Reliability Network Upgrade has been assigned to more than one Interconnection Customer in accordance with this LGIP, and the applicable Participating TO(s) has elected not to fund the full capital of the Reliability Network Upgrade, the applicable Participating TO(s) shall invoice each Interconnection Customer under LGIA Article 12 for such Reliability Network Upgrade based on the ratio of the maximum megawatt electrical output of each new Large Generating Facility or the amount of megawatt increase in the

generating capacity of each existing Generating Facility as listed the Generating Facility's Interconnection Request to the aggregate maximum megawatt electrical output of all such new Large Generating Facilities and increases in the generating capacity of existing Generating Facilities assigned responsibility for such Reliability Network Upgrade. Each Interconnection Customer may be invoiced up to a maximum amount no greater than that established by the cost responsibility assigned to that Interconnection Customer under LGIP Section 7.3.

- (c) Where the funding responsibility for a Delivery Network Upgrade has been assigned to more than one Interconnection Customer in accordance with this LGIP, and the applicable Participating TO(s) has elected not to fund the full capital of the Delivery Network Upgrade, the applicable Participating TO(s) shall invoice each Interconnection Customer under LGIA Article 12 for such Delivery Network Upgrade based on the percentage flow impact of each assigned Large Generating Facility on each Delivery Network Upgrade as determined by the Generation distribution factor methodology used in the On-Peak and Off-Peak Deliverability Assessments performed in the Phase II Interconnection Study. Each Interconnection Customer may be invoiced up to a maximum amount no greater than that established by the cost responsibility assigned to that Interconnection Customer under LGIP Section 7.4.

Any permissible extension of the Commercial Operation Date of a Large Generating Facility will not alter the Interconnection Customer's obligation to finance Network Upgrades where the Network Upgrades are required to meet the earlier Commercial Operation Date(s) of other Large Generating Facilities that have also been assigned cost responsibility for the Network Upgrades.

### **12.3.2 Repayment of Amounts Advanced for Network Upgrades and Refund of Interconnection Financial Security.**

Upon the Commercial Operation Date of the Large Generating Facility, which shall be the Commercial Operation Date of the entire Large Generating Facility, if phased, the Interconnection Customer shall be entitled to a repayment for the Interconnection Customer's contribution to the cost of Network Upgrades in accordance with its cost responsibility assigned under LGIP Sections 7.3 and 7.4. Such amount shall be paid to the Interconnection Customer by the applicable Participating TO(s) on a dollar-for-dollar basis either through (1) direct payments made on a levelized basis over the five-year period commencing on the Large Generating Facility's Commercial Operation Date; or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years of the Commercial Operation Date. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment. The Interconnection Customer may assign such repayment rights to any person.

Instead of direct payments, the Interconnection Customer may elect to receive Firm Transmission Rights (FTRs) in accordance with the CAISO Tariff associated with the Network Upgrades, or portions thereof, that were funded by the Interconnection Customer, to the extent such FTRs or alternative rights are available under the CAISO Tariff at the time of the election. Such FTRs would take effect upon the Commercial Operation Date of the Large Generating Facility, which shall be the Commercial Operation Date of the entire Large Generating Facility, if phased, in accordance with the LGIA.

### **12.4 Special Provisions for Affected Systems and Other Affected Participating TOs.**

The Interconnection Customer shall enter into an agreement with the owner of the Affected System and/or other affected Participating TO(s), as applicable. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to the owner of the Affected System and/or other affected Participating TO(s) as well as the repayment by the owner of the Affected System and/or other affected Participating TO(s). If the affected entity is another Participating TO, the initial form of agreement will be the LGIA, as appropriately modified.

Any repayment by the owner of the Affected System shall be in accordance with FERC Order No. 2003-B (109 FERC ¶ 61,287).

## **Section 13 Miscellaneous.**

### **13.1 Confidentiality.**

Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Parties receiving the information that the information is confidential.

If requested by any Party, the other Parties shall provide in writing, the basis for asserting that the information referred to in this Section warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

The confidentiality provisions of this LGIP are limited to information provided pursuant to this LGIP.

#### **13.1.1 Scope.**

Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or breach of the LGIA; or (6) is required, in accordance with LGIP Section 13.1.6, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the LGIP. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

#### **13.1.2 Release of Confidential Information.**

No Party shall release or disclose Confidential Information to any other person, except to its employees, consultants, Affiliates (limited by FERC's Standards of Conduct requirements set forth in Part 358 of FERC's Regulations, 18 C.F.R. 358), or to parties

who may be or considering providing financing to or equity participation with the Interconnection Customer, or to potential purchasers or assignees of the Interconnection Customer, on a need-to-know basis in connection with these procedures, unless such person has first been advised of the confidentiality provisions of this LGIP Section 13.1 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this LGIP Section 13.1.

### **13.1.3 Rights.**

Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Parties. The disclosure by each Party to the other Parties of Confidential Information shall not be deemed a waiver by a Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

### **13.1.4 No Warranties.**

By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to the other Parties nor to enter into any further agreements or proceed with any other relationship or joint venture.

### **13.1.5 Standard of Care.**

Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under these procedures or its regulatory requirements.

### **13.1.6 Order of Disclosure.**

If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Parties with prompt notice of such request(s) or requirement(s) so that the other Parties may seek an appropriate protective order or waive compliance with the terms of the LGIP. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

### **13.1.7 Remedies.**

Monetary damages are inadequate to compensate a Party for another Party's breach of its obligations under this LGIP Section 13.1. Each Party accordingly agrees that the other Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party breaches or threatens to breach its obligations under this LGIP Section 13.1, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the breach of this LGIP Section 13.1, but shall be in addition to all other remedies available at law or in equity. Further, the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for



indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this LGIP Section 13.1.

#### **13.1.8 Disclosure to FERC, its Staff, or a State.**

Notwithstanding anything in this LGIP Section 13.1 to the contrary, and pursuant to 18 C.F.R. section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to the LGIP, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. section 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other applicable Parties when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner, consistent with applicable state rules and regulations.

**13.1.9** Subject to the exception in LGIP Section 13.1.8, any Confidential Information shall not be disclosed by the other Parties to any person not employed or retained by the other Parties, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Parties, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this LGIP or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a subregional, regional or national reliability organization or planning group. The Party asserting confidentiality shall notify the other Parties in writing of the information it claims is confidential. Prior to any disclosures of another Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

**13.1.10** This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a breach of this provision).

**13.1.11** The Participating TO or CAISO shall, at the Interconnection Customer's election, destroy, in a confidential manner, or return the Confidential Information provided at the time of Confidential Information is no longer needed.

#### **13.2 Delegation of Responsibility.**

The CAISO and the Participating TOs may use the services of subcontractors as deemed appropriate to perform their obligations under this LGIP. The applicable Participating TO or CAISO shall remain primarily liable to the Interconnection Customer for the performance of its respective subcontractors and compliance with its obligations of this LGIP. The subcontractor shall keep all information provided confidential and shall use such information solely for the performance of such obligation for which it was provided and no other purpose.

**13.3 [NOT USED]**

**13.4 [NOT USED]**

**13.5 Disputes.**

If an Interconnection Customer disputes withdrawal of its Interconnection Request under LGIP Section 3.8, the CAISO will forward any information regarding the disputed withdrawal received under LGIP Section 3.8 within one (1) Business Day to the LGIP Executive Dispute Committee, consisting of the Vice President responsible for administration of this LGIP, the CAISO Vice President responsible for customer affairs, and an additional Vice President. The LGIP Executive Dispute Committee shall have five (5) Business Days to determine whether or not to restore the Interconnection Request. If the LGIP Executive Dispute Committee concludes that the Interconnection Request should have been withdrawn, the Interconnection Customer may seek relief in accordance with the CAISO ADR Procedures.

All disputes, other than those arising from LGIP Section 3.8, arising out of or in connection with this LGIP whereby relief is sought by or from the CAISO shall be settled in accordance with the CAISO ADR Procedures.

Disputes arising out of or in connection with this LGIP not subject to the CAISO ADR Procedures shall be resolved as follows:

**13.5.1 Submission.**

In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with the LGIA, the LGIP, or their performance, such Party (the "disputing Party") shall provide the other Party with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) calendar days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of the LGIA and LGIP.

**13.5.2 External Arbitration Procedures.**

Any arbitration initiated under these procedures shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) calendar days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) calendar days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules") and any applicable FERC regulations or RTO rules; provided, however, in the event of a conflict

between the Arbitration Rules and the terms of this LGIP Section 13.5, the terms of this LGIP Section 13.5 shall prevail.

### **13.5.3 Arbitration Decisions.**

Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) calendar days of appointment and shall notify the Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of the LGIA and LGIP and shall have no power to modify or change any provision of the LGIA and LGIP in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

### **13.5.4 Costs.**

Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

## **13.6 Local Furnishing Bonds.**

### **13.6.1 Participating TOs That Own Facilities Financed by Local Furnishing Bonds.**

This provision is applicable only to a Participating TO that has financed facilities for the local furnishing of electric energy with Local Furnishing Bonds. Notwithstanding any other provisions of this LGIP, the Participating TO and the CAISO shall not be required to provide Interconnection Service to the Interconnection Customer pursuant to this LGIP and the LGIA if the provision of such Interconnection Service would jeopardize the tax-exempt status of any Local Furnishing Bond(s) issued for the benefit of the Participating TO.

### **13.6.2 Alternative Procedures for Requesting Interconnection Service.**

If a Participating TO determines that the provision of Interconnection Service requested by the Interconnection Customer would jeopardize the tax-exempt status of any Local Furnishing Bond(s) issued for the benefit of the Participating TO, it shall advise the Interconnection Customer and the CAISO within (30) calendar days of receipt of the Interconnection Request.

The Interconnection Customer thereafter may renew its request for the same interconnection Service by tendering an application under Section 211 of the Federal Power Act, in which case the Participating TO, within ten (10) calendar days of receiving a copy of the Section 211 application, will waive its rights to a request for service under Section 213(a) of the Federal Power Act and to the issuance of a proposed order under Section 212(c) of the Federal Power Act, and the CAISO and Participating TO shall provide the requested Interconnection Service pursuant to the terms and conditions set forth in this LGIP and the LGIA.

## **13.7 Change in CAISO Operational Control.**

If the CAISO no longer has control of the portion of the CAISO Controlled Grid at the Point of Interconnection during the period when an Interconnection Request is pending, the CAISO shall transfer to the applicable former Participating TO or successor entity which has ownership of the Point of Interconnection any amount of the deposit or payment with interest thereon that exceeds the cost that it incurred to evaluate the request for interconnection. Any difference between such net deposit amount and the costs that the former Participating TO or successor entity incurs to evaluate the request for interconnection shall be paid by or refunded to the Interconnection Customer, as appropriate. The CAISO shall coordinate with the applicable former Participating TO or successor entity which has ownership of the Point of Interconnection to complete any Interconnection Study, as appropriate, that the CAISO has begun but has not completed. If the CAISO has tendered a draft LGIA to the Interconnection Customer but the Interconnection Customer has neither executed the LGIA nor requested the filing of an unexecuted LGIA with FERC, unless otherwise provided, the Interconnection Customer must complete negotiations with the applicable former Participating TO or successor entity which has the ownership of the Point of Interconnection.

**APPENDIX 1 to LGIP**  
**INTERCONNECTION REQUEST**

Provide three copies of this completed form pursuant to Section 7 of this LGIP Appendix 1 below.

1. The undersigned Interconnection Customer submits this request to interconnect its Large Generating Facility with the CAISO Controlled Grid pursuant to the CAISO Tariff.

2. This Interconnection Request is for (check one):  
                    A proposed new Large Generating Facility.  
                    An increase in the generating capacity or a Material Modification to an existing Generating Facility.

3. Requested Deliverability Status is for (check one):  
 Full Capacity  
 Energy Only

4. The Interconnection Customer provides the following information:

a. Address or location, including the county, of the proposed new Large Generating Facility site or, in the case of an existing Generating Facility, the name and specific location, including the county, of the existing Generating Facility;

Project Name:

Project Location:

Street Address:

City, State:

County:

Zip Code:

b. Maximum megawatt electrical output of the proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity of an existing Generating Facility;

Maximum megawatt electrical output (Net MW):            or

Megawatt increase (Net MW):

c. Type of project (i.e., gas turbine, hydro, wind, etc.) and general description of the equipment configuration;

- |  |  |
|--|--|
| <input type="checkbox"/> <u>Cogeneration</u>   | <input type="checkbox"/> <u>Reciprocating Engine</u> |
| <input type="checkbox"/> <u>Biomass</u>        | <input type="checkbox"/> <u>Steam Turbine</u>        |
| <input type="checkbox"/> <u>Gas Turbine</u>    | <input type="checkbox"/> <u>Wind</u>                 |
| <input type="checkbox"/> <u>Hydro</u>          | <input type="checkbox"/> <u>Photovoltaic</u>         |
| <input type="checkbox"/> <u>Combined Cycle</u> |  |

Other (please describe):

General description of the equipment configuration:

d. Proposed In-Service Date, Trial Operation date and Commercial Operation Date by day, month, and year and term of service (dates must be sequential);

Proposed In-Service Date: \_\_\_\_\_ / /  
Proposed Trial Operation date: \_\_\_\_\_ / /  
Proposed Commercial Operation Date: \_\_\_\_\_ / /  
Proposed Term of Service (years): \_\_\_\_\_

e. Name, address, telephone number, and e-mail address of the Interconnection Customer's contact person;

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Company Name: \_\_\_\_\_  
Street Address: \_\_\_\_\_  
City, State: \_\_\_\_\_  
Zip Code: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Fax Number: \_\_\_\_\_  
Email Address: \_\_\_\_\_  
Interconnection  
Customer's  
DUNS Number \_\_\_\_\_

f. Approximate location of the proposed Point of Interconnection (i.e., specify interconnection point, voltage level, and the location of interconnection); and

g. Interconnection Customer data (set forth in Attachment A)

**The Interconnection Customer shall provide to the CAISO the technical data called for in LGIP Appendix 1, Attachment A. Three (3) copies are required.**

5. Applicable deposit amount as specified in the LGIP made payable to California ISO. Send check to CAISO along with the:

1. Appendix 1 to LGIP (Interconnection Request) for processing.
2. Attachment A to Appendix 1 (Interconnection Request Large Generating Facility Data).

6. Evidence of Site Exclusivity as specified in the LGIP and name(s), address(es) and contact information of site owner(s) (check one):

\_\_\_\_\_ Is attached to this Interconnection Request  
\_\_\_\_\_ Deposit in lieu of Site Exclusivity attached, Site Exclusivity will be provided at a later date in accordance with this LGIP

7. This Interconnection Request shall be submitted to the representative indicated below:

New Resource Interconnection  
California ISO  
P.O. Box 639014  
Folsom, CA 95763-9014

Overnight address: 151 Blue Ravine Road, Folsom, CA 95630

8. Representative of the Interconnection Customer to contact:

[To be completed by the Interconnection Customer]

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Company Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State: \_\_\_\_\_

Zip Code: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Fax Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

9. This Interconnection Request is submitted by:

Legal name of the Interconnection Customer:

By (signature): \_\_\_\_\_

Name (type or print):

Title:

Date:

**Attachment A**  
**To LGIP Appendix 1**  
**Interconnection Request**

**LARGE GENERATING FACILITY DATA**

Provide three copies of this completed form pursuant to Section 7 of LGIP Appendix 1.

**1. Provide two original prints and one reproducible copy (no larger than 36" x 24") of the following:**

- A. Site drawing to scale, showing generator location and Point of Interconnection with the CAISO Controlled Grid.
- B. Single-line diagram showing applicable equipment such as generating units, step-up transformers, auxiliary transformers, switches/disconnects of the proposed interconnection, including the required protection devices and circuit breakers. For wind generator farms, the one line diagram should include the distribution lines connecting the various groups of generating units, the generator capacitor banks, the step up transformers, the distribution lines, and the substation transformers and capacitor banks at the Point of Interconnection with the CAISO Controlled Grid.

**2. Generating Facility Information**

- A. Total Generating Facility rated output (kW): \_\_\_\_\_
- B. Generating Facility auxiliary Load (kW): \_\_\_\_\_
- C. Project net capacity (kW): \_\_\_\_\_
- D. Standby Load when Generating Facility is off-line (kW): \_\_\_\_\_
- E. Number of Generating Units: \_\_\_\_\_  
(Please repeat the following items for each generator)
- F. Individual generator rated output (kW for each unit): \_\_\_\_\_
- G. Manufacturer: \_\_\_\_\_
- H. Year Manufactured: \_\_\_\_\_
- I. Nominal Terminal Voltage: \_\_\_\_\_
- J. Rated Power Factor (%): \_\_\_\_\_
- K. Type (Induction, Synchronous, D.C. with Inverter): \_\_\_\_\_
- L. Phase (3 phase or single phase): \_\_\_\_\_
- M. Connection (Delta, Grounded WYE, Ungrounded WYE, impedance grounded): \_\_\_\_\_
- N. Generator Voltage Regulation Range: \_\_\_\_\_
- O. Generator Power Factor Regulation Range: \_\_\_\_\_
- P. For combined cycle plants, specify the plant output for an outage of the steam turbine or an outage of a single combustion turbine: \_\_\_\_\_

**3. Synchronous Generator – General Information:**

(Please repeat the following for each generator)

- A. Rated Generator speed (rpm): \_\_\_\_\_
- B. Rated MVA: \_\_\_\_\_
- C. Rated Generator Power Factor: \_\_\_\_\_
- D. Generator Efficiency at Rated Load (%): \_\_\_\_\_
- E. Moment of Inertia (including prime mover): \_\_\_\_\_
- F. Inertia Time Constant (on machine base) H: \_\_\_\_\_ sec or MJ/MVA
- G. SCR (Short-Circuit Ratio - the ratio of the field current required for rated open-circuit voltage to the field current required for rated short-circuit current): \_\_\_\_\_
- H. Please attach generator reactive capability curves.



- I. Rated Hydrogen Cooling Pressure in psig (Steam Units only): \_\_\_\_\_
- J. Please attach a plot of generator terminal voltage versus field current that shows the air gap line, the open-circuit saturation curve, and the saturation curve at full load and rated power factor.

**4. Excitation System Information**

(Please repeat the following for each generator)

A. Indicate the Manufacturer \_\_\_\_\_ and Type \_\_\_\_\_ of excitation system used for the generator. For exciter type, please choose from 1 to 8 below or describe the specific excitation system.

- (1) Rotating DC commutator exciter with continuously acting regulator. The regulator power source is independent of the generator terminal voltage and current.
- (2) Rotating DC commutator exciter with continuously acting regulator. The regulator power source is bus fed from the generator terminal voltage.
- (3) Rotating DC commutator exciter with non-continuously acting regulator (i.e., regulator adjustments are made in discrete increments).
- (4) Rotating AC Alternator Exciter with non-controlled (diode) rectifiers. The regulator power source is independent of the generator terminal voltage and current (not bus-fed).
- (5) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers. The regulator power source is fed from the exciter output voltage.
- (6) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers.
- (7) Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from the generator terminal voltage.
- (8) Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from a combination of generator terminal voltage and current (compound-source controlled rectifiers system).

B. Attach a copy of the block diagram of the excitation system from its instruction manual. The diagram should show the input, output, and all feedback loops of the excitation system.

C. Excitation system response ratio (ASA): \_\_\_\_\_

D. Full load rated exciter output voltage: \_\_\_\_\_

E. Maximum exciter output voltage (ceiling voltage): \_\_\_\_\_

F. Other comments regarding the excitation system?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**5. Power System Stabilizer Information.**

(Please repeat the following for each generator. All new generators are required to install PSS unless an exemption has been obtained from WECC. Such an exemption can be obtained for units that do not have suitable excitation systems.)

A. Manufacturer: \_\_\_\_\_

B. Is the PSS digital or analog? \_\_\_\_\_

C. Note the input signal source for the PSS?  
 \_\_\_\_\_ Bus frequency \_\_\_\_\_ Shaft speed \_\_\_\_\_ Bus Voltage  
 \_\_\_\_\_ Other (specify source)

D. Please attach a copy of a block diagram of the PSS from the PSS Instruction Manual and the correspondence between dial settings and the time constants or PSS gain.

E. Other comments regarding the PSS?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**6. Turbine-Governor Information**

(Please repeat the following for each generator)

Please complete Part A for steam, gas or combined-cycle turbines, Part B for hydro turbines, and Part C for both.

A. Steam, gas or combined-cycle turbines:

- (1) List type of unit (Steam, Gas, or Combined-cycle): \_\_\_\_\_
- (2) If steam or combined-cycle, does the turbine system have a reheat process (i.e., both high and low pressure turbines)? \_\_\_\_\_
- (3) If steam with reheat process, or if combined-cycle, indicate in the space provided, the percent of full load power produced by each turbine:  
Low pressure turbine or gas turbine: \_\_\_\_\_ %  
High pressure turbine or steam turbine: \_\_\_\_\_ %

B. Hydro turbines:

- (1) Turbine efficiency at rated load: \_\_\_\_\_ %
- (2) Length of penstock: \_\_\_\_\_ ft
- (3) Average cross-sectional area of the penstock: \_\_\_\_\_ ft<sup>2</sup>
- (4) Typical maximum head (vertical distance from the bottom of the penstock, at the gate, to the water level): \_\_\_\_\_ ft
- (5) Is the water supply run-of-the-river or reservoir: \_\_\_\_\_
- (6) Water flow rate at the typical maximum head: \_\_\_\_\_ ft<sup>3</sup>/sec
- (7) Average energy rate: \_\_\_\_\_ kW-hrs/acre-ft
- (8) Estimated yearly energy production: \_\_\_\_\_ kW-hrs

C. Complete this section for each machine, independent of the turbine type.

- (1) Turbine manufacturer: \_\_\_\_\_
- (2) Maximum turbine power output: \_\_\_\_\_ MW
- (3) Minimum turbine power output (while on line): \_\_\_\_\_ MW
- (4) Governor information:
  - (a) Droop setting (speed regulation): \_\_\_\_\_
  - (b) Is the governor mechanical-hydraulic or electro-hydraulic (Electro-hydraulic governors have an electronic speed sensor and transducer.)? \_\_\_\_\_
  - (c) Other comments regarding the turbine governor system?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**7. Synchronous Generator and Associated Equipment – Dynamic Models:**

For each generator, governor, exciter and power system stabilizer, select the appropriate dynamic model from the General Electric PSLF Program Manual and provide the required input data. The manual is available on the GE website at [www.gepower.com](http://www.gepower.com). Select the following links within the website: 1) Our Businesses, 2) GE Power Systems, 3) Energy Consulting, 4) GE PSLF Software, 5) GE PSLF User's Manual.

There are links within the GE PSLF User's Manual to detailed descriptions of specific models, a definition of each parameter, a list of the output channels, explanatory notes, and a control system block diagram. The block diagrams are also available on the CAISO Website.

If you require assistance in developing the models, we suggest you contact General Electric. Accurate models are important to obtain accurate study results. Costs associated with any changes in facility requirements that are due to differences between model data provided by the generation developer and the actual generator test data, may be the responsibility of the generation developer.

**8. Induction Generator Data:**

- A. Rated Generator Power Factor at rated load: \_\_\_\_\_
- B. Moment of Inertia (including prime mover): \_\_\_\_\_
- C. Do you wish reclose blocking? Yes \_\_\_\_\_, No \_\_\_\_\_

Note: Sufficient capacitance may be on the line now, or in the future, and the generator may self-excite unexpectedly.

**9. Generator Short Circuit Data**

For each generator, provide the following reactances expressed in p.u. on the generator base:

- $X''1$  – positive sequence subtransient reactance: \_\_\_\_\_
- $X''2$  – negative sequence subtransient reactance: \_\_\_\_\_
- $X''0$  – zero sequence subtransient reactance: \_\_\_\_\_

Generator Grounding:

- A. Solidly grounded
- B. Grounded through an impedance  
Impedance value in p.u on generator base. R: \_\_\_\_\_ p.u.  
X: \_\_\_\_\_ p.u.
- C. Ungrounded

**10. Step-Up Transformer Data**

For each step-up transformer, fill out the data form provided in Table 1.

**11. Line Data**

There is no need to provide data for new lines that are to be planned by the Participating TO. However, for transmission lines that are to be planned by the generation developer, please provide the following information:

Nominal Voltage: \_\_\_\_\_  
Line Length (miles): \_\_\_\_\_  
Line termination Points: \_\_\_\_\_  
Conductor Type: \_\_\_\_\_ Size: \_\_\_\_\_  
If bundled. Number per phase: \_\_\_\_\_, Bundle spacing: \_\_\_\_\_ in.  
Phase Configuration. Vertical: \_\_\_\_\_, Horizontal: \_\_\_\_\_  
Phase Spacing (ft): A-B: \_\_\_\_\_, B-C: \_\_\_\_\_, C-A: \_\_\_\_\_  
Distance of lowest conductor to Ground: \_\_\_\_\_ ft  
Ground Wire Type: \_\_\_\_\_ Size: \_\_\_\_\_ Distance to Ground: \_\_\_\_\_ ft  
Attach Tower Configuration Diagram  
Summer line ratings in amperes (normal and emergency) \_\_\_\_\_  
Resistance ( R ): \_\_\_\_\_ p.u.\*\*  
Reactance: ( X ): \_\_\_\_\_ p.u.\*\*  
Line Charging (B/2): \_\_\_\_\_ p.u.\*\*

\*\* On 100-MVA and nominal line voltage (kV) Base

**12. Wind Generators**

Number of generators to be interconnected pursuant to this Interconnection Request: \_\_\_\_\_

Elevation: \_\_\_\_\_ Single Phase \_\_\_\_\_ Three Phase

Inverter manufacturer, model name, number, and version:  
\_\_\_\_\_

List of adjustable setpoints for the protective equipment or software:  
\_\_\_\_\_

Field Volts: \_\_\_\_\_

Field Amperes: \_\_\_\_\_

Motoring Power (kW): \_\_\_\_\_

Neutral Grounding Resistor (If Applicable): \_\_\_\_\_

$I_2^2t$  or K (Heating Time Constant): \_\_\_\_\_

Rotor Resistance: \_\_\_\_\_

Stator Resistance: \_\_\_\_\_

Stator Reactance: \_\_\_\_\_

Rotor Reactance: \_\_\_\_\_

Magnetizing Reactance: \_\_\_\_\_

Short Circuit Reactance: \_\_\_\_\_

Exciting Current: \_\_\_\_\_

Temperature Rise: \_\_\_\_\_

Frame Size: \_\_\_\_\_

Design Letter: \_\_\_\_\_

Reactive Power Required In Vars (No Load): \_\_\_\_\_

Reactive Power Required In Vars (Full Load): \_\_\_\_\_

Total Rotating Inertia, H: \_\_\_\_\_ Per Unit on KVA Base

Note: A completed General Electric Company Power Systems Load Flow (PSLF) data sheet must be supplied with the Interconnection Request. If other data sheets are more appropriate to the proposed device then they shall be provided and discussed at Scoping Meeting.

TABLE 1  
TRANSFORMER DATA

| UNIT  |                  |                  |                  |
|---|------------------|------------------|------------------|
| NUMBER OF TRANSFORMERS  | PHASE            |                  |                  |
| <u>RATED KVA</u>  | <u>H Winding</u> | <u>X Winding</u> | <u>Y Winding</u> |
| <u>Connection</u><br>(Delta, Wye, Gnd.)                                 | _____            | _____            | _____            |
| <u>55 C Rise</u>  | _____            | _____            | _____            |
| <u>65 C Rise</u>  | _____            | _____            | _____            |
| <u>RATED VOLTAGE</u>  | _____            | _____            | _____            |
| <u>BIL</u>  | _____            | _____            | _____            |
| <u>AVAILABLE TAPS</u><br>(planned or existing)                          | _____            | _____            | _____            |
| <u>LOAD TAP CHANGER?</u>  | _____            | _____            | _____            |
| <u>TAP SETTINGS</u>   | _____            | _____            | _____            |
| <u>COOLING TYPE :</u> OA      OA/FA      OA/FA/FA      OA/FOA           | _____            | _____            | _____            |
| <u>IMPEDANCE</u>  | <u>H-X</u>       | <u>H-Y</u>       | <u>X-Y</u>       |
| Percent   | _____            | _____            | _____            |
| MVA Base  | _____            | _____            | _____            |
| Tested Taps   | _____            | _____            | _____            |
| <u>WINDING RESISTANCE</u>   | <u>H</u>         | <u>X</u>         | <u>Y</u>         |
| Ohms  | _____            | _____            | _____            |
| <u>CURRENT TRANSFORMER RATIOS</u>                                       |                  |                  |                  |
| <u>H</u> _____  | <u>X</u> _____   | <u>Y</u> _____   | <u>N</u> _____   |
| <u>PERCENT EXCITING CURRENT 100 % Voltage; _____ 110% Voltage _____</u> |                  |                  |                  |

Supply copy of nameplate and manufacture's test report when available

## Appendix 2 to

### Large Generator Interconnection Procedures (LGIP) Relating to the Transition Cluster

#### Section 1. Objective, Applicability and Definitions.

##### 1.1 Objective and Applicability.

The objective of this Appendix 2 to the Large Generator Interconnection Procedures (LGIP) is to implement the requirements for interconnecting to the CAISO Controlled Grid those Generating Facilities assigned to the Transition Cluster. All Interconnection Requests assigned to the Transition Cluster shall be deemed to have been assigned to a Queue Cluster Window for purposes of LGIP Section 1.1 and therefore all provisions of the LGIP apply to Generating Facilities included in the Transition Cluster, except as set forth herein.

##### 1.2 Definitions.

###### 1.2.1 Master Definitions Supplement and Other General Definition Rules.

Unless the context otherwise requires, any word or expression defined in the Master Definitions Supplement, Appendix A to the CAISO Tariff, shall have the same meaning where used in this Appendix 2 to the LGIP. Further, unless the context otherwise requires, any word or expression defined in LGIP Section 1.2 shall have the same meaning where used in this Appendix 2 to the LGIP. References to LGIP in this Appendix 2 are to Appendix GG of the CAISO Tariff.

###### 1.2.2 Special Definitions for this LGIP Appendix 2.

In this Appendix 2 to the LGIP, the following words and expressions shall have the meanings set opposite them:

“Serial Study Group” shall mean the collection of valid Interconnection Requests with an assigned Queue Position on or before June 1, 2008 studied in accordance with the interconnection procedures set forth in the version of the LGIP set forth in CAISO Tariff Appendix U as permitted by the decision of FERC in Docket No. ER08-960-000.

“Transition Cluster” shall mean the collection of valid Interconnection Requests with an assigned Queue Position on or before June 1, 2008 that were not included as part of the Serial Study Group by the decision of FERC in Docket No. ER08-960-000.

“Transition Cluster Interconnection Study Deposit” shall mean, for each Interconnection Request in the Transition Cluster other than those subject to Section 3.2 of this Appendix 2 to the LGIP, the difference between (i) \$250,000 and (ii) the total amount the Interconnection Customer has been charged for Interconnection Studies performed under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement plus the balance of any remaining deposit provided under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement. For an Interconnection Request subject to Section 3.2 of this Appendix 2 to the LGIP, the amount of the Transition Cluster Interconnection Study Deposit shall be the difference between (i) \$100,000 and (ii) the total amount the Interconnection Customer has been charged for Interconnection Studies performed under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement plus the balance of any

remaining deposit provided under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement.

## **2. Queue Position.**

The Queue Position of any Interconnection Request included in the Transition Cluster shall be deemed to be lower than that of any Interconnection Request included in the Serial Study Group for purposes of performing Interconnection Studies for Large Generating Facilities whose Interconnection Requests are in the Serial Study Group.

## **3. Requirements to Remain in the Transition Cluster.**

### **3.1 General Requirements for Large Generating Facilities.**

An Interconnection Request deemed to be included in the Transition Cluster in accordance with the decision of FERC in Docket No. ER08-960-000 will be deemed to have been withdrawn from the Transition Cluster unless the Interconnection Customer provides, within sixty (60) calendar days from the effective date of this Appendix 2 to the LGIP, all of the following: (i) a Transition Cluster Interconnection Study Deposit, (ii) a statement of the requested deliverability status, (iii) a preferred Point of Interconnection and voltage level and all other technical data required by the LGIP, if not already submitted to the CAISO, and (iv) demonstration of Site Exclusivity or a posting of a Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity must be, at a minimum, through the anticipated Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility.

Section 3.8 of the LGIP shall not apply to a failure to satisfy the requirements of this Section 3.1 of this Appendix 2 to the LGIP.

### **3.2 Special Requirements for Certain Small and Existing Large Generating Facilities.**

An Interconnection Customer with an Interconnection Request in the Transition Cluster relating to (a) a Small Generating Facility seeking a Deliverability Assessment or (b) a Generating Facility, subject to the LGIP in accordance with CAISO Tariff Section 25.1.1, that has achieved Commercial Operation prior to the date of the Interconnection Request, and is seeking to increase the capacity of the Generating Facility by less than 20 MW, will be deemed to have withdrawn its Interconnection Request from the Transition Cluster unless it provides, within sixty (60) calendar days from the effective date of this Appendix 2 to the LGIP, all of the following: (i) a Transition Cluster Interconnection Study Deposit, (ii) a statement of the requested deliverability status, (iii) a preferred Point of Interconnection and voltage level and all other technical data required by the LGIP, if not already submitted to the CAISO, and (iv) demonstration of Site Exclusivity or a posting of a Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity, at a minimum, must be through the Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility.

Section 3.8 of the LGIP shall not apply to a failure to satisfy the requirements of this Section 3.2 of this Appendix 2 to the LGIP.

### **3.3 Communication of Transition Cluster Interconnection Study Deposit Amount.**

The CAISO shall provide each Interconnection Customer with the amount of its Transition Cluster Interconnection Study Deposit within five (5) Business Days after the effective date of this Appendix 2 to the LGIP.

### **3.4 Use of the Transition Cluster Interconnection Study Deposit.**

The CAISO shall deposit all Transition Cluster Interconnection Study Deposits in an interest bearing account at a bank or financial institution designated by the CAISO. The Transition Cluster Interconnection Study Deposit shall be applied to pay for prudent costs incurred by the CAISO, the Participating TOs, or third parties at the direction of the CAISO or Participating TOs, as applicable, to perform and administer the Interconnection Studies. The Transition Cluster Interconnection Study Deposit is not refundable.

Upon execution of an LGIA by an Interconnection Customer, the CAISO and the applicable Participating TO(s), or the approval by FERC of an unexecuted LGIA, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Transition Cluster Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceed the costs the CAISO, Participating TOs, or third parties have incurred on the Interconnection Customer's behalf.

Notwithstanding the foregoing, an Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request during an Interconnection Study Cycle shall be obligated to pay to the CAISO all costs in excess of the Transition Cluster Interconnection Study Deposit that have been prudently incurred or irrevocably have been committed to be incurred with respect to that Interconnection Request prior to withdrawal. The CAISO will reimburse the applicable Participating TO(s) or third parties, as applicable, for all work performed associated with the Interconnection Request at the CAISO's direction. The Interconnection Customer must pay all monies due before it is allowed to obtain any Interconnection Study data or results.

All non-refundable portions of the Transition Cluster Interconnection Study Deposit that exceed the costs the CAISO, Participating TOs, or third parties have incurred on the Interconnection Customer's behalf shall be treated in accordance with CAISO Tariff Section 37.9.4.

### **3.5 Obligation for Study Costs.**

The CAISO shall charge and the Interconnection Customer shall pay the actual costs of the Interconnection Studies. The CAISO shall issue invoices for Interconnection Studies that shall include a detailed and itemized accounting of the cost of each Interconnection Study. The CAISO shall draw from the Transition Cluster Interconnection Study Deposit any undisputed costs within thirty (30) calendar days after issuance of an invoice therefor. Whenever the actual cost of performing the Interconnection Studies exceeds the Transition Cluster Interconnection Study Deposit, the Interconnection Customer shall pay the undisputed difference in accordance with the CAISO issued invoice within thirty (30) calendar days. The CAISO shall not be obligated to continue to have any studies conducted unless the Interconnection Customer has paid all undisputed amounts in compliance herewith. In the event an Interconnection Study is performed by the CAISO, the Interconnection Customer shall pay only the costs of those activities performed by the Participating TO to adequately review or validate that Interconnection Study.

## **4. Phase I Interconnection Study.**

### **4.1 Grouping Interconnection Requests and Base Cases.**

Interconnection Requests in the Transition Cluster shall be grouped in accordance with LGIP Section 6.1. Rather than Generation submitted during a Queue Cluster Window, the Interconnection Base Case Data for the Transition Cluster shall reflect the Generation



from those Interconnection Requests that satisfy the requirements of Sections 3.1 and 3.2 of this Appendix 2 to the LGIP.

#### **4.2 Schedule.**

The Phase I Interconnection Study, as described in LGIP Section 6, including the grouping and Interconnection Base Case Data development, for the Transition Cluster shall commence no later than December 1, 2008 or sixty (60) calendar days after the effective date of this Appendix 2 to the LGIP, whichever is later. Results of the Phase I Interconnection Study shall be provided to the Interconnection Customer within two hundred forty (240) calendar days after commencement under this Section.

#### **4.3 Results Meeting**

Within sixty (60) calendar days after providing the Phase I Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s), the CAISO and the Interconnection Customer shall meet to discuss the results of the Phase I Interconnection Study, including assigned cost responsibility.

### **5. Phase II Interconnection Study.**

#### **5.1 Phase II Interconnection Study Procedures.**

The Phase II Interconnection Study, as described in LGIP Section 7, for the Transition Cluster shall commence no later than one hundred twenty (120) calendar days after publication of the Phase I Interconnection Study report. Results of the Phase II Interconnection Study shall be provided to the Interconnection Customer within three hundred thirty (330) calendar days after commencement under this Section.

#### **5.2 Coordination of the Phase II Interconnection Study with the Transmission Planning Process.**

As part of the Uniform Planning Assumptions and Study Plan developed under Section 24 in Appendix EE of the CAISO Tariff during calendar year 2009, the CAISO shall include technical analyses intended to identify, at a minimum, conceptual transmission upgrades that may access proposed Large Generating Facilities included in the Transition Cluster that are located in Energy Resource Areas.

### **6. Interconnection Financial Security.**

The provisions of LGIP Section 9 shall apply to the Transition Cluster, except that the initial posting of Interconnection Financial Security under LGIP Section 9.2 in Appendix GG shall be required on or before one hundred twenty (120) calendar days after publication of the Phase I Interconnection Study report.

**Appendix 3 to LGIP**

**LARGE GENERATOR INTERCONNECTION STUDY PROCESS AGREEMENT**

**THIS AGREEMENT** is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_, ("Interconnection Customer") and the California Independent System Operator Corporation, a California nonprofit public benefit corporation existing under the laws of the State of California, ("CAISO"). The Interconnection Customer and the CAISO each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

**WHEREAS**, the Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_; and

**WHEREAS**, the Interconnection Customer desires to interconnect the Large Generating Facility with the CAISO Controlled Grid; and

**WHEREAS**, the Interconnection Customer has requested the CAISO to conduct or cause to be performed Interconnection Studies to assess the system impact of interconnecting the Large Generating Facility to the CAISO Controlled Grid and to specify and estimate the cost of the equipment, engineering, procurement and construction work needed on the Participating TO's electric system in accordance with Good Utility Practice to physically and electrically connect the Large Generating Facility to the CAISO Controlled Grid;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 \_\_\_\_\_ When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the CAISO's FERC-approved Large Generation Interconnection Procedures in CAISO Tariff Appendix GG ("LGIP") or the Master Definitions Supplement, Appendix A to the CAISO Tariff, as applicable.
- 2.0 \_\_\_\_\_ The Interconnection Customer elects and the CAISO shall conduct or cause to be performed Interconnection Studies, including any accelerated Interconnection Study, consistent with the LGIP in accordance with the CAISO Tariff.
- 3.0 \_\_\_\_\_ The scope of the Interconnection Studies shall be subject to the assumptions set forth in Appendices A and B to this Agreement.
- 4.0 \_\_\_\_\_ The Interconnection Studies will be based upon the technical information provided by the Interconnection Customer in the Interconnection Request, as may be modified as the result of the Scoping Meeting, subject to any modifications in accordance with Section 6.7.2 of the LGIP and modifications to the proposed Commercial Operation Date of the Large Generating Facility permitted by the LGIP. The CAISO reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Studies. If the Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the Interconnection Studies may be modified as specified in the LGIP.

5.0 The Interconnection Study report for each Interconnection Study shall provide the information specified in the LGIP.

6.0 The Interconnection Customer shall provide an Interconnection Study Deposit, a Site Exclusivity Deposit, if applicable, and other Interconnection Financial Security for the performance of the Interconnection Studies in accordance with the provisions of Sections 3.5.1 and 9 of the LGIP.

Following the issuance of an Interconnection Study report, the CAISO shall charge and the Interconnection Customer shall pay its share of the actual costs of the Interconnection Study pursuant to Sections 3.5.1 and 7.8 of the LGIP.

Any difference between the deposits made toward the Interconnection Study process and associated administrative costs, including any accelerated studies, and the actual cost of the Interconnection Studies and associated administrative costs shall be paid by or refunded to the Interconnection Customer, in the appropriate allocation, in accordance with Section 3.5.1 of the LGIP.

7.0 Pursuant to Section 3.7 of the LGIP, the CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems. The CAISO may provide a copy of the Phase I Interconnection Study results to an Affected System Operator and the Western Electricity Coordinating Council. Requests for review and input from Affected System Operators or the Western Electricity Coordinating Council may arrive at any time prior to interconnection.

8.0 Substantial portions of technical data and assumptions used to perform the Phase I Interconnection Study, such as system conditions, existing and planned generation, and unit modeling, may change after the CAISO provides the Interconnection Study results to the Interconnection Customer. Interconnection Study results will reflect available data at the time the CAISO provides the Phase I Interconnection Study report to the Interconnection Customer. The CAISO shall not be responsible for any additional costs, including, without limitation, costs of new or additional facilities, system upgrades, or schedule changes, that may be incurred by the Interconnection Customer as a result of changes in such data and assumptions.

9.0 **[NOT USED]**

10.0 The CAISO shall maintain records and accounts of all costs incurred in performing the Interconnection Study in sufficient detail to allow verification of all costs incurred, including associated overheads. The Interconnection Customer shall have the right, upon reasonable notice, within a reasonable time at the CAISO's offices and at its own expense, to audit the CAISO's records as necessary and as appropriate in order to verify costs incurred by the CAISO. Any audit requested by the Interconnection Customer shall be completed, and written notice of any audit dispute provided to the CAISO representative, within one hundred eighty (180) calendar days following receipt by the Interconnection Customer of the CAISO's notification of the final costs of the Interconnection Study.

11.0 In accordance with Section 3.8 of the LGIP, the Interconnection Customer may withdraw its Interconnection Request at any time by written notice to the CAISO. Upon receipt of such notice, this Agreement shall terminate, subject to the requirements of Section 3.5.1 and 13.1 of the LGIP.

- 12.0 Pursuant to Section 4 of the LGIP, this Agreement shall become effective upon the date the fully executed Agreement is received by the CAISO. If the CAISO does not receive the fully executed Agreement and deposit or other Interconnection Financial Security pursuant to Section 3.5.1 of the LGIP, then the Interconnection Request will be deemed withdrawn upon the Interconnection Customer's receipt of written notice by the CAISO pursuant to Section 3.8 of the LGIP.
- 13.0 Miscellaneous.
- 13.1 Dispute Resolution. Any dispute, or assertion of a claim, arising out of or in connection with this Agreement, shall be resolved in accordance with Section 13.5 of the LGIP.
- 13.2 Confidentiality. Confidential Information shall be treated in accordance with Section 13.1 of the LGIP.
- 13.3 Binding Effect. This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 13.4 Conflicts. In the event of a conflict between the body of this Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.
- 13.5 Rules of Interpretation. This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article or Section of this Agreement or such Appendix to this Agreement, or such Section of the LGIP or such Appendix to the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article, Section, or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".
- 13.6 Entire Agreement. This Agreement, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part

of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.

13.7 No Third Party Beneficiaries. This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.

13.8 Waiver. The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO or CAISO. Any waiver of this Agreement shall, if requested, be provided in writing.

Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.

13.9 Headings. The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.

13.10 Multiple Counterparts. This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

13.11 Amendment. The Parties may by mutual agreement amend this Agreement by a written instrument duly executed by both of the Parties.

13.12 Modification by the Parties. The Parties may by mutual agreement amend the Appendices to this Agreement by a written instrument duly executed by both of the Parties. Such amendment shall become effective and a part of this Agreement upon satisfaction of all applicable laws and regulations.

13.13 Reservation of Rights. The CAISO shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or

206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

- 13.14 No Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.
- 13.15 Assignment. This Agreement may be assigned by a Party only with the written consent of the other Party; provided that a Party may assign this Agreement without the consent of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; and provided further that the Interconnection Customer shall have the right to assign this Agreement, without the consent of the other Party, for collateral security purposes to aid in providing financing for the Large Generating Facility, provided that the Interconnection Customer will require any secured party, trustee or mortgagee to notify the other Party of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Section will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the other Party of the date and particulars of any such exercise of assignment right(s). Any attempted assignment that violates this Section is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

**IN WITNESS THEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

**California Independent System Operator Corporation**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[Insert name of the Interconnection Customer]**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Appendix A**

**Large Generator Interconnection  
Study Process Agreement**

**ASSUMPTIONS USED IN CONDUCTING THE  
PHASE I INTERCONNECTION STUDY**

The Phase I Interconnection Study will be based upon the information set forth in the Interconnection Request and agreed upon in the Scoping Meeting held on \_\_\_\_\_, subject to any modifications in accordance with Section 6.7.2 of the LGIP, and the following assumptions:

Designation of Point of Interconnection and configuration to be studied.

Deliverability status requested (full capacity or Energy only)



**Appendix B**

**Large Generator Interconnection  
Study Process Agreement**

**DATA FORM TO BE PROVIDED BY THE INTERCONNECTION CUSTOMER  
PRIOR TO COMMENCEMENT OF THE PHASE II INTERCONNECTION STUDY**

Generating Facility size (MW): \_\_\_\_\_

Provide two copies of this completed form and other required plans and diagrams in accordance with Section 7.1 of the LGIP.

Provide location plan and one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.

One set of metering is required for each generation connection to the new bus or existing CAISO Controlled Grid station. Number of generation connections: \_\_\_\_\_

On the one line indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)

On the one line indicate the location of auxiliary power. (Minimum load on CT/PT)

Will an alternate source of auxiliary power be available during CT/PT maintenance?

Yes \_\_\_\_\_ No \_\_\_\_\_

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? Yes \_\_\_\_\_ No \_\_\_\_\_

(Please indicate on one line).

What type of control system or PLC will be located at the Interconnection Customer's Large Generating Facility?

\_\_\_\_\_  
\_\_\_\_\_

What protocol does the control system or PLC use?

\_\_\_\_\_  
\_\_\_\_\_

Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.

Physical dimensions of the proposed interconnection station:

Bus length from generation to interconnection station:

Line length from interconnection station to the Participating TO's transmission line.

Tower number observed in the field. (Painted on tower leg)\*

Number of third party easements required for transmission lines\*:

\* To be completed in coordination with the Participating TO or CAISO.

Is the Large Generating Facility in the Participating TO's service area?

Yes                      No

Local service provider for auxiliary and other power: \_\_\_\_\_

Please provide proposed schedule dates:

Environmental survey start: \_\_\_\_\_

Environmental impact report submittal: \_\_\_\_\_

Procurement of project equipment: \_\_\_\_\_

Begin Construction \_\_\_\_\_ Date: \_\_\_\_\_

Generator step-up transformer \_\_\_\_\_ Date: \_\_\_\_\_  
receives back feed power

Generation Testing \_\_\_\_\_ Date: \_\_\_\_\_

Commercial Operation Date: \_\_\_\_\_

Level of Deliverability: Choose one of the following:

Energy Only

Full Capacity

Appendix 4 to LGIP

**AGREEMENT FOR THE ALLOCATION OF RESPONSIBILITIES WITH REGARD TO  
LARGE GENERATOR INTERCONNECTION PROCEDURES AND INTERCONNECTION STUDY  
AGREEMENTS**

This Agreement for the Allocation of Responsibilities With Regard to Large Generator Interconnection Procedures and Interconnection Study Agreements ("Agreement"), dated \_\_\_\_\_, is entered into between the California Independent System Operator Corporation ("CAISO") and [NAME OF PTO] ("PTO"). The CAISO and PTO are jointly referred to as the "Parties" and individually, as a "Party."

WHEREAS, this Agreement will ensure an independent assessment of new Large Generating Facility impacts on the CAISO Controlled Grid and take advantage of the respective expertise of the Parties to facilitate efficient and cost effective Interconnection Study procedures in a manner consistent with the Federal Energy Regulatory Commission's ("FERC") July 1, 2005 Order (112 FERC ¶ 61,009), FERC's August 26, 2005 Order (112 FERC ¶ 61,231), and prior FERC Orders recognizing that Order No. 2003 did not allocate responsibilities between transmission owners and transmission providers for the provision of Interconnection Service and suggesting those parties enter into an agreement to allocate those responsibilities. Southwest Power Pool, Inc., 106 FERC ¶ 61,254 (2004).

NOW THEREFORE, in view of the respective responsibilities assigned to the Parties and the foregoing FERC orders, and the provisions of the CAISO's Large Generator Interconnection Procedures set forth in CAISO Tariff Appendix GG ("LGIP"), the CAISO and PTO agree to the following allocation of responsibilities for a centralized Interconnection Study process under the direction and oversight of the CAISO:

**1. DEFINITIONS.**

Unless otherwise defined herein, all capitalized terms shall have the meaning set forth in the CAISO Tariff.

**2. TERM OF AGREEMENT.**

This Agreement shall become effective upon the date specified in the first paragraph above and shall remain in effect until (1) terminated by all Parties in writing, or (2) with respect to the PTO, upon the termination of that entity's status as a PTO pursuant to the Transmission Control Agreement, as amended from time to time.

**3. PROVISIONS FOR ALLOCATION OF RESPONSIBILITIES BETWEEN CAISO AND PTO.**

**3.1 Interconnection Service:** The Parties acknowledge that, as the transmission provider, the CAISO is responsible for reliably operating the transmission grid. The Parties also recognize that while the CAISO is a transmission provider under the CAISO Tariff, the CAISO does not own any transmission facilities, and the PTO owns, constructs, and maintains the facilities to which Large Generating Facilities are to be interconnected, and that the PTO may construct or modify facilities to allow the interconnection. While the Parties recognize that the CAISO will be responsible for conducting or causing to be performed Interconnection Studies and similar studies, the PTO will participate in these studies and conduct certain portions of studies, under the direction and oversight of, and approval by, the CAISO, as provided in this Agreement. The CAISO shall not enter into any Interconnection Study agreement with an Interconnection Customer that is contrary to these rights.

**3.2 [INTENTIONALLY LEFT BLANK]**

**3.3 Transmission Owners' Right to Participation in Studies, Committees and Meetings:**

**3.3.1** In the event that an Interconnection Customer proposes to interconnect a Large Generating Facility with the PTO's facilities, or the PTO is an owner of an affected system, the PTO shall have the right to participate in any Interconnection Study or any other study conducted in connection with such request for Interconnection Service. "Participate" in this Section 3.3.1 means physically perform any study or portion thereof in connection with an Interconnection Request, under the direction and oversight of, and approval by, the CAISO pursuant to Section 3.4 of this Agreement; provide or receive input, data or other information regarding any study or portion thereof consistent with Section 3.4 of this Agreement; and, when any study or portion thereof in connection with an Interconnection Request is physically performed by an entity other than the PTO, perform activities necessary to adequately review or validate, as appropriate, any results of the study or portions thereof and provide recommendations.

**3.3.2** In the event that an Interconnection Customer proposes to interconnect a Large Generating Facility with the PTO's facilities, or the PTO is an owner of an affected system, the PTO shall have the right to participate in all meetings expressly established pursuant to the CAISO LGIP. As appropriate, the PTO may participate in all other material or substantive communications in connection with an Interconnection Request.

**3.4** **Interconnection Study Responsibility Allocation:** In complying with its responsibility for conducting or causing to be performed Interconnection Studies, the CAISO will assign responsibility for performance of portions of the Interconnection Studies to the PTO, under the direction and oversight of, and approval by, the CAISO, as set forth in Attachment A, except as specifically qualified as follows:

**3.4.1** For any tasks specifically assigned to the PTO pursuant to Attachment A or otherwise mutually agreed upon by the CAISO and the PTO, the CAISO reserves the right, on a case-by-case basis, to perform or reassign to a mutually agreed upon and pre-qualified contractor such task only where: (a) the quality and accuracy of prior PTO Interconnection Study work product resulting from assigned tasks has been deemed deficient by the CAISO, the CAISO has notified the PTO pursuant to the notice provision of Section 4.16 of this Agreement in writing of the deficiency, and the deficiency has not been cured pursuant to Section 3.4.2 of this Agreement; (b) the timeliness of PTO Interconnection Study work product has been deemed deficient, and either (i) the CAISO has not been notified of the reasons and actions taken to address the timeliness of the work, or (ii) if notified, the stated reasons and actions taken are insufficient or unjustifiable and the PTO has not cured the deficiency pursuant to Section 3.4.2 of this Agreement; (c) the PTO has failed, in a mutually agreed upon timeframe, to provide the CAISO with information or data related to an Interconnection Request despite a written request by the CAISO, pursuant to Section 3.5 hereof, to do so, and such data is the responsibility of the PTO to provide to the CAISO, subject to Section 4.3 of this Agreement; (d) the PTO advises the CAISO in writing that it does not have the resources to adequately or timely perform the task according to the applicable timelines set forth in Attachment A; or (e) the estimated cost of the PTO performing the task has been determined in writing by the CAISO to significantly exceed the cost of the CAISO or mutually agreed upon contractor performing the task, inclusive of the costs that will be incurred by the PTO in exercising its review rights of the results of any such tasks performed by such third party(ies). If the CAISO deviates from the assignments set forth in Attachment A based on the foregoing factors, the CAISO will provide the PTO with a written explanation for the deviation and any

associated reassignments of work. The PTO may contest the deviation pursuant to the Dispute Resolution procedures set forth in Section 4.1 of this Agreement.

Task(s) may only be reassigned in accordance with this Section 3.4.1 where the PTO has been deemed to be deficient in relation to that (those) particular task(s).

**3.4.2 Cure for reassigned Interconnection Study work**

The CAISO shall not reassign task(s) without the opportunity to cure, as specified in Section 3.4.1 of this Agreement. The following actions will serve to cure the deficiencies and result in restoring the assignment(s) as provided in Attachment

A:

- (a) The CAISO and PTO shall negotiate in good faith and agree to a corrective action plan proposed by the PTO, including a reasonably adequate cure period, and the corrective action plan is satisfactorily implemented.
- (b) The CAISO determines the deficiency is cured without an action plan.

**3.4.3** Assessment of prior PTO Interconnection Study work shall only be based on work conducted under the process that becomes effective concurrent with the effective date of this Agreement. Further, assessment of prior PTO Interconnection Study work shall be based on work conducted no earlier than the eighteen (18) month period prior to the date of the CAISO notice of deviation from assignments set forth in Attachment A to this Agreement.

**3.5 Information Exchange:** The PTO shall provide the CAISO, subject to confidentiality requirements in Section 4.3 of this Agreement, with any documentation or data requested by the CAISO reasonably necessary to permit the CAISO to perform, review, validate and approve any Interconnection Study, or portion thereof, performed by the PTO. The CAISO shall provide the PTO with any documentation or data requested by the PTO, subject to confidentiality requirements in Section 4.3 of this Agreement, reasonably necessary to perform, review, and validate any Interconnection Study, or portion thereof.

**3.6 Consistency with Provisions for Centralized Interconnection Study Process:** The CAISO and PTO have determined that the processes and allocation of responsibilities in Section 3.4 of this Agreement ensure that impacts to the CAISO Controlled Grid are independently assessed and that the assignment of responsibilities minimizes handoffs, takes advantage of non-transferable skills, and promotes the efficiency and cost-effectiveness of the centralized Interconnection Study processes, consistent with LGIP Section 3.2.

**3.7 Re-Studies:** If any re-studies are required, the CAISO will confer with the PTO as to the need for a re-study. The CAISO will make the final determination regarding the need for a re-study, subject to dispute resolution procedures.

**3.8 Use of Contractors:** Nothing in this Agreement shall prevent either the CAISO or the PTO from using qualified, mutually agreed upon third party contractors to meet that Party's rights or obligations under this Agreement or the LGIP. To promote the efficiency of the process, the CAISO and PTO will collaborate to identify a list of the mutually agreed to qualified contractors available to the Parties.

**3.9 Performance Standards:** Each Party shall perform all of its obligations under the LGIP, this Agreement, and any FERC approved Interconnection Study procedures that may be adopted by the CAISO to implement the LGIP or this Agreement in accordance with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice.

**3.10 Recovery of Costs:** In accordance with Section 3.5.1 of the LGIP, the PTO shall recover all actual costs from the CAISO incurred in performing Interconnection Studies or portions thereof assigned to it by the CAISO, including all costs incurred in exercising its right to review, and make recommendations on, Interconnection Studies or portions thereof performed by the CAISO and/or contractors under Section 3.8 of this Agreement.

#### **4. GENERAL TERMS AND CONDITIONS.**

**4.1 Dispute Resolution:** In the event any dispute regarding the terms, conditions, and performance of this Agreement is not settled informally, the Parties shall follow the CAISO ADR Procedures set forth in Section 13 of the CAISO Tariff.

**4.2 Liability:** No Party to this Agreement shall be liable to any other Party for any direct, indirect, special, incidental or consequential losses, damages, claims, liabilities, costs or expenses (including attorneys fees and court costs) arising from the performance or non-performance of its obligations under this Agreement regardless of the cause (including intentional action, willful action, gross or ordinary negligence, or force majeure); provided, however, that a Party may seek equitable or other non-monetary relief as may be necessary to enforce this Agreement and that damages for which a Party may be liable to another Party under another agreement will not be considered damages under this Agreement.

**4.3 Confidentiality:** Confidential Information shall be treated in accordance with Section 13.1 of the LGIP.

**4.4 Binding Effect:** This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.

**4.5 Conflicts:** In the event of a conflict between the body of this Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.

**4.6 Rules of Interpretation:** This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section, Attachment, or Appendix means such Article or Section of this Agreement or such Attachment or Appendix to this Agreement, or such Section of the LGIP or such Appendix to the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article or Section; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".

- 4.7 Entire Agreement:** This Agreement, including all Attachments hereto, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, among the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants, which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.
- 4.8 No Third Party Beneficiaries:** This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.
- 4.9 Waiver:** The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party. Any waiver at any time by a Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Any waiver of this Agreement shall, if requested, be provided in writing. Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- 4.10 Headings:** The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.
- 4.11 Multiple Counterparts:** This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 4.12 Modification by the Parties:** The Parties may amend this Agreement and any Appendices to this Agreement only (1) by mutual agreement of the Parties by a written instrument duly executed by the Parties, subject to FERC approval or (2) upon the issuance of a FERC order, pursuant to Section 206 of the Federal Power Act. It is the Parties' intent that FERC's right to change any provision of this Agreement shall be limited to the maximum extent permissible by law and that any such change, if permissible, shall be in accordance with the Mobile-Sierra public interest standard applicable to fixed rate agreements. *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956). Such amendment shall become effective and a part of this Agreement upon satisfaction of all applicable laws and regulations. Notwithstanding the foregoing, Attachment B (Notices) may be modified as set forth in Section 4.15 of this Agreement, and the CAISO and the PTO may from time to time mutually agree to deviate from Attachment A in accordance with the provisions of this Agreement, however, such deviation shall be subject to Section 4.9 of this Agreement and not considered a course of dealing.
- 4.13 No Partnership:** This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.

**4.14 Assignment:** This Agreement may be assigned by a Party only with the written consent of the other Parties; provided that a Party may assign this Agreement without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

**4.15 Notices:** Any notice, demand, or request provided in this Agreement, or served, given, or made in connection with it, will be in writing and deemed properly served, given, or made if delivered in person, transmitted by facsimile, or sent by United States mail, postage prepaid, to the persons specified in Attachment B hereto unless otherwise provided in this Agreement. Any Party may at any time, by notice to all other Parties, change the designation or address of the person specified in Attachment B as the person who receives notices pursuant to this Agreement.

**IN WITNESS WHEREOF,** the Parties have executed this Agreement in multiple originals, each of which shall constitute and be an original effective agreement among the Parties.

**California Independent System Operator Corporation**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[NAME OF PTO]**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



## ATTACHMENT A

### INTERCONNECTION STUDY RESPONSIBILITY ALLOCATION

Description of Large Generator Interconnection Process: Roles and Responsibilities of CAISO and PTOs.

**Purpose:** This Attachment A to the “AGREEMENT FOR THE ALLOCATION OF RESPONSIBILITIES WITH REGARD TO LARGE GENERATOR INTERCONNECTION PROCEDURES AND INTERCONNECTION STUDY AGREEMENTS” serves as further clarification of the roles and responsibilities of the parties to this Agreement. The CAISO will assign responsibility for performance of portions of the Interconnection Studies to the relevant PTOs, under the direction and oversight of, and approval by, the CAISO, as set forth in this Attachment A. This document serves as a general overview of only the roles and responsibilities as between the CAISO and PTOs. This Agreement does not include the process steps, involvement or obligations of the Interconnection Customer (IC). This Agreement is not inclusive of all procedures necessary to comply with all provisions of the LGIA, LGIP and Large Generator Interconnection Study Process Agreement.

#### **Interconnection Request (IR) Process**

1. CAISO forwards the IR to the PTO within three (3) Business Days (BD) of receipt of IR from Interconnection Customer (IC)
2. PTO(s) provides any feed back regarding IR to CAISO within 3 BD
3. CAISO distributes draft Scoping Meeting minutes for review within 5 BD of Scoping Meeting.
4. PTO(s) provide any comments to the Scoping Meeting minutes within 2 BD of receipt of draft Scoping Meeting minutes.
5. CAISO issues the final Scoping Meeting minutes within 3 BD of receipt of comments.

## Phase I Interconnection Study Timeline

| <u>Line</u>  | <u>Initial (Phase I) Cluster Study</u>   | <u>Typical Calendar Days</u> | <u>Timeline (Days)</u> |
|--|--|------------------------------|------------------------|
| <u>1</u>   | <u>CAISO and PTOs develop initial Generating Facility groups for initial Dispatch assumptions and cost allocation purposes (except for thermal overload mitigation).</u>   | <u>7</u>                     | <u>1-7</u>             |
| <u>2</u>   | <u>PTOs develop draft Base Cases, each representing all Generating Facilities in the queue cluster, and deliver to CAISO.</u>  | <u>21</u>                    | <u>1-21</u>            |
| <u>3</u>   | <u>PTO develops preferred and alternative, if applicable, direct interconnection plans, including the need for an Interconnection Grid Substation (IGS).</u>   | <u>25</u>                    | <u>22-46</u>           |
| <u>4</u>   | <u>PTO develops draft contingency lists.</u>   | <u>25</u>                    | <u>22-46</u>           |
| <u>5</u>   | <u>CAISO reviews and approves Base Cases and direct interconnection plans and merges them together, as needed.</u><br><u>CAISO updates summer peak Base Cases to reflect withdrawn projects from previous queue cluster study. PTOs update off-peak Base Cases.</u><br><u>CAISO reviews and approves contingency lists. PTO needs time to consider CAISO proposed changes.</u> | <u>21</u>                    | <u>47-67</u>           |
| <u>6</u>   | <u>CAISO provides Deliverability Assessment results identifying constrained facilities, using summer peak Base Cases, and prepares results summary and may propose mitigation plans for PTO review.</u>  | <u>21</u>                    | <u>68-88</u>           |
| <u>7</u>   | <u>At the CAISO's direction, the PTO performs the off-peak Load Flow, and summer peak and off-peak Post Transient and Stability analyses and identifies mitigation solutions, as appropriate, and submits draft study results to CAISO for review and direction.</u>   | <u>21</u>                    | <u>68-88</u>           |
| <u>8</u>   | <u>PTO develops mitigation plans for summer peak and off-peak or supplements CAISO proposed mitigation plans for consideration, as appropriate, and submits to CAISO for review and direction</u>  | <u>21</u>                    | <u>89-109</u>          |
| <u>9</u>   | <u>CAISO retests Deliverability Assessment results with proposed Delivery Network Upgrades and withdrawn projects from previous cluster study removed. PTO reviews and comments on retest results.</u>   | <u>14</u>                    | <u>110-123</u>         |
| <u>10</u>  | <u>CAISO develops shift factors for cost allocation purposes of all Network Upgrades associated with mitigating thermal overloads.</u>   | <u>7</u>                     | <u>124-130</u>         |
| <b><u>Short Circuit Duty (concurrent with the LF/PT/S)</u></b> |  |                              |                        |
| <u>11</u>  | <u>CAISO coordinates with other potentially affected facility owners.<sup>1</sup></u>  | <u>n/a</u>                   | <u>n/a</u>             |
| <u>12</u>  | <u>CAISO directs PTO to develop Base Case and run short circuit analysis.</u>  | <u>21</u>                    | <u>46-66</u>           |
| <u>13</u>  | <u>PTO performs facilities review. (Note: possibly for feedback into the power flow studies and PTO mitigation plans.)</u>   | <u>28</u>                    | <u>67-94</u>           |

<sup>1</sup> In accordance with the WECC Short Circuit Duty Procedure

|  |  |           |                |
|--|--|-----------|----------------|
| <u>14</u>                                    | <u>PTO prepares draft study results and submits to the CAISO for review and direction.</u>   | <u>28</u> | <u>95-123</u>  |
| <b>Facility cost estimates and schedules</b> |  |           |                |
| <u>15</u>                                    | <u>At the CAISO's direction, PTO(s) prepares cost estimates and schedules for the direct assignment facilities and Network Upgrades identified in the power flow, short circuit duty, post transient, and stability studies.</u>   | <u>20</u> | <u>124-143</u> |
| <b>Final Report</b>                          |  |           |                |
| <u>16</u>                                    | <u>At the CAISO's direction, PTO(s) prepares draft report for impacts in its service territory.</u>  | <u>7</u>  | <u>144-150</u> |
| <u>17</u>                                    | <u>CAISO compiles all results into a draft report that covers grid impacts, as appropriate. CAISO reviews integrated draft report and submits comments, recommendations and direction to the PTO.</u>  | <u>9</u>  | <u>151-159</u> |
| <u>18</u>                                    | <u>PTO incorporates CAISO's directions, conclusions and recommendations. If CAISO conclusions and recommendations conflict with PTO conclusions, then CAISO and PTO must coordinate to resolve conflicts. Any remaining conflicts must be noted in the final report.</u> | <u>14</u> | <u>160-173</u> |
| <u>19</u>                                    | <u>PTO submits final draft report to the CAISO. The CAISO will finalize the report and tender the CAISO approved report to the ICs.</u>  |           |                |
| <b>Final Study Report</b>                    |  |           |                |
| <u>20</u>                                    | <u>CAISO provides final approved report to ICs, PTO, and any applicable Affected Systems.</u>  | <u>7</u>  | <u>174-180</u> |

**Phase II Interconnection Study Process\*\***

**\*\*All Interconnection Studies will be under the direction and oversight of, and approval by, the CAISO and may involve more than one PTO.**

| <u>Line</u> | <u>Standard Project Refinement and Facilities Study</u>   | <u>Typical Calendar Days</u> | <u>Timeline (Days)</u> |
|-------------|---|------------------------------|------------------------|
| <u>21</u>   | <u>PTOs update Base Cases from Phase I Interconnection Study line 5 to remove projects that have withdrawn.</u>   | <u>30</u>                    | <u>1-30</u>            |
| <u>22</u>   | <u>CAISO reviews and approves Base Cases.</u>   |                              |                        |
| <u>23</u>   | <u>CAISO and PTOs update studies performed in Phase I lines 6-14 using Base Cases from line 22. Additional alternatives may be considered that address future generation development potential, meet load serving capability, and economic benefit objectives, and phased development and option value of transmission projects to address uncertainty.</u>   | <u>120</u>                   | <u>31-150</u>          |
| <u>23.1</u> | <u>Projects from line 23 requiring CPUC or CAISO Governing Board approval may need to go through the Transmission Planning Process stakeholder process. After completing the stakeholder review process, these projects would proceed through the activities described in lines 24 through 32. Projects not requiring CPUC or CAISO Governing Board approval, or that have already gone through a</u> |                              |                        |

|  |   |           |                 |
|--|---|-----------|-----------------|
|  | <u>stakeholder process, would proceed immediately to the activities described in lines 24 through 32. (See Appendix C of the CAISO's proposal for the generator interconnection process reform.)</u>  |           |                 |
| <u>24</u>                                  | <u>PTOs develop draft off-peak and summer peak operating year Base Cases as appropriate where each case includes all Generating Facilities in Phase II Interconnection Study having the same operating date and deliver to CAISO.</u>   | <u>30</u> | <u>151-180*</u> |
| <u>25</u>                                  | <u>CAISO reviews and approves cases from line 24.</u>   |           |                 |
| <u>26</u>                                  | <u>At the CAISO's direction, the PTOs perform operational studies using cases from line 25 to determine Network Upgrade requirements for each study year and identify any special operational requirements to connect projects in the year of study.</u>  | <u>45</u> | <u>181-225*</u> |
| <u>27</u>                                  | <u>At the CAISO's direction, the PTOs perform additional operational studies to identify the optimal approach for building out the overall plan of service on a segmented (i.e. building block) basis acknowledging that portions of the overall plan of service may be staged in segments over time.</u> | <u>30</u> | <u>226-255*</u> |
| <b><u>Final Plan of Service Report</u></b> |   |           |                 |
| <u>28</u>                                  | <u>At the CAISO's direction, PTO(s) prepares draft plan of service report.</u>  | <u>7</u>  | <u>256-262*</u> |
| <u>29</u>                                  | <u>CAISO reviews draft plan of service report and submits comments, recommendations and direction to the PTO.</u>   | <u>9</u>  | <u>263-271*</u> |
| <u>30</u>                                  | <u>PTO incorporates CAISO directions, conclusions and recommendations. If CAISO conclusions and recommendations conflict with PTO conclusions, then CAISO and PTO must coordinate to resolve conflicts. Any remaining conflicts must be noted in the final report.</u>                                    | <u>14</u> | <u>272-285*</u> |
| <u>31</u>                                  | <u>PTO submits final draft report to the CAISO. The CAISO will finalize the report.</u>   |           |                 |
| <b><u>Facility Costs and Schedules</u></b> |   |           |                 |
| <u>32</u>                                  | <u>At the CAISO's direction, PTO(s) prepares detailed cost estimates and schedules for the direct assignment facilities and Network Upgrades identified in the overall plan of service and including individual segments.</u>   | <u>75</u> | <u>256-330*</u> |

\* For projects going through the Transmission Planning Process as described in Line 23.1, the activities in lines 24 through 32 may be delayed until the Network Upgrade plan is approved through the Transmission Planning Process. However, the subsequent cluster study would proceed on schedule based on the plan of service from line 23.

**ATTACHMENT B**  
**CONTACTS FOR NOTICES**

**[Section 4.15]**

**California ISO**

Manager, Transmission Engineering  
151 Blue Ravine Road  
Folsom, CA 95630  
Phone: 916.351.2104  
Fax: 916.351.2264

**[NAME OF PTO]**

[Address of PTO]

\* \* \*

**Attachment C3 – Blacklines**  
**Generation Interconnection Process Reform Amendment Filing**

**Currently Effective CAISO Tariff**

\* \* \*

**CAISO TARIFF APPENDIX HH**

**Large Generator Interconnection Agreement  
for Interconnection Requests in a Queue Cluster Window**

LARGE GENERATOR INTERCONNECTION AGREEMENT (LGIA)

[INTERCONNECTION CUSTOMER]

[PARTICIPATING TO]

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION



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## LARGE GENERATOR INTERCONNECTION AGREEMENT

[INTERCONNECTION CUSTOMER]

[PARTICIPATING TO]

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

THIS LARGE GENERATOR INTERCONNECTION AGREEMENT ("LGIA") is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and among \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ ("Interconnection Customer" with a Large Generating Facility), \_\_\_\_\_, a corporation organized and existing under the laws of the State of California ("**Participating TO**"), and **California Independent System Operator Corporation**, a California nonprofit public benefit corporation organized and existing under the laws of the State of California ("CAISO"). Interconnection Customer, Participating TO, and CAISO each may be referred to as a "Party" or collectively as the "Parties."

### RECITALS

WHEREAS, CAISO exercises Operational Control over the CAISO Controlled Grid; and

WHEREAS, the Participating TO owns, operates, and maintains the Participating TO's Transmission System; and

WHEREAS, Interconnection Customer intends to own, lease and/or control and operate the Generating Facility identified as a Large Generating Facility in Appendix C to this LGIA; and

WHEREAS, Interconnection Customer, Participating TO, and CAISO have agreed to enter into this LGIA for the purpose of interconnecting the Large Generating Facility with the Participating TO's Transmission System;

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein, it is agreed:

When used in this LGIA, terms with initial capitalization that are not defined in Article 1 shall have the meanings specified in the Article in which they are used.

### ARTICLE 1. DEFINITIONS

**Adverse System Impact** shall mean the negative effects due to technical or operational limits on conductors or equipment being exceeded that may compromise the safety and reliability of the electric system.

**Affected System** shall mean an electric system other than the CAISO Controlled Grid that may be affected by the proposed interconnection, including the Participating TO's electric system that is not part of the CAISO Controlled Grid.

**Affiliate** shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Council** shall mean the Western Electricity Coordinating Council or its successor.

**Applicable Reliability Standards** shall mean the requirements and guidelines of NERC, the Applicable Reliability Council, and the Balancing Authority Area of the Participating TO's Transmission System to which the Generating Facility is directly interconnected.

**Balancing Authority** shall mean the responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.

**Balancing Authority Area** shall mean the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.

**Base Case** shall mean the base case power flow, short circuit, and stability data bases used for the Interconnection Studies.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of this LGIA.

**Breaching Party** shall mean a Party that is in Breach of this LGIA.

**Business Day** shall mean Monday through Friday, excluding federal holidays and the day after Thanksgiving Day.

**CAISO Controlled Grid** shall mean the system of transmission lines and associated facilities of the parties to the Transmission Control Agreement that have been placed under the CAISO's Operational Control.

**CAISO Tariff** shall mean the CAISO's tariff, as filed with FERC, and as amended or supplemented from time to time, or any successor tariff.

**Calendar Day** shall mean any day including Saturday, Sunday or a federal holiday.

**Commercial Operation** shall mean the status of an Electric Generating Unit or project phase at a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

**Commercial Operation Date** of an Electric Generating Unit or project phase shall mean the date on which the Electric Generating Unit or project phase at the Generating Facility commences Commercial Operation as agreed to by the applicable Participating TO, the CAISO, and the Interconnection Customer pursuant to Appendix E to this LGIA, and in accordance with the implementation plan agreed to by the Participating TO and the CAISO for multiple individual Electric Generating Units or project phases at a Generating Facility where an Interconnection Customer intends to establish separate Commercial Operation Dates for those Electric Generating Units or project phases.

**Confidential Information** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the



information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, subject to Article 22.1.2.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of this LGIA.

**Distribution System** shall mean those non-CAISO-controlled transmission and distribution facilities owned by the Participating TO.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to the Participating TO's Distribution System. Distribution Upgrades do not include Interconnection Facilities.

**Effective Date** shall mean the date on which this LGIA becomes effective upon execution by all Parties subject to acceptance by FERC, or if filed unexecuted, upon the date specified by FERC.

**Electric Generating Unit** shall mean an individual electric generator and its associated plant and apparatus whose electrical output is capable of being separately identified and metered.

**Emergency Condition** shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the CAISO, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the CAISO Controlled Grid or the electric systems of others to which the CAISO Controlled Grid is directly connected; (3) that, in the case of the Participating TO, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Participating TO's Transmission System, Participating TO's Interconnection Facilities, Distribution System, or the electric systems of others to which the Participating TO's electric system is directly connected; or (4) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions; provided, that Interconnection Customer is not obligated by this LGIA to possess black start capability.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**Federal Power Act** shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a et seq.

**FERC** shall mean the Federal Energy Regulatory Commission or its successor.

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**Generating Facility** shall mean the Interconnection Customer's Electric Generating Unit(s) used for the production of electricity identified in the Interconnection Customer's Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Generating Facility Capacity** shall mean the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices.

**Good Utility Practice** shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a

reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be any one of a number of the optimum practices, methods, or acts to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** shall mean any federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, CAISO, Participating TO, or any Affiliate thereof.

**Hazardous Substances** shall mean any chemicals, materials or substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "hazardous constituents," "restricted hazardous materials," "extremely hazardous substances," "toxic substances," "radioactive substances," "contaminants," "pollutants," "toxic pollutants" or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**Initial Synchronization Date** shall mean the date upon which an Electric Generating Unit is initially synchronized and upon which Trial Operation begins.

**In-Service Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Participating TO's Interconnection Facilities to obtain back feed power.

**Interconnection Customer's Interconnection Facilities** shall mean all facilities and equipment, as identified in Appendix A of this LGIA, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Participating TO's Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Participating TO's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Participating TO's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Financial Security** shall have the meaning assigned to it in Section 1.2 of the LGIP.

**Interconnection Handbook** shall mean a handbook, developed by the Participating TO and posted on the Participating TO's web site or otherwise made available by the Participating TO, describing technical and operational requirements for wholesale generators and loads connected to the Participating TO's portion of the CAISO Controlled Grid, as such handbook may be modified or superseded from time to time. Participating TO's standards contained in the Interconnection Handbook shall be deemed consistent with Good Utility Practice and Applicable Reliability Standards. In the event of a conflict between the terms of this LGIA and the terms of the Participating TO's Interconnection Handbook, the terms in this LGIA shall apply.

**Interconnection Request** shall mean a request, in the form of Appendix 1 to the Large Generator Interconnection Procedures, in accordance with the CAISO Tariff.

**Interconnection Service** shall mean the service provided by the Participating TO and CAISO associated with interconnecting the Interconnection Customer's Generating Facility to the Participating TO's Transmission System and enabling the CAISO Controlled Grid to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of this LGIA, the Participating TO's Transmission Owner Tariff, and the CAISO Tariff.

**Interconnection Study** shall mean either of the following studies: the Phase I Interconnection Study or the Phase II Interconnection Study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), pursuant to the Large Generator Interconnection Procedures.

**IRS** shall mean the Internal Revenue Service.

**Large Generating Facility** shall mean a Generating Facility having a Generating Facility Capacity of more than 20 MW.

**Large Generator Interconnection Procedures (LGIP)** shall mean the CAISO protocol that sets forth the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that is included in CAISO Tariff Appendix GG.

**Large Generator Interconnection Study Process Agreement** shall mean the agreement between the Interconnection Customer and the CAISO for the conduct of the Interconnection Studies.

**Loss** shall mean any and all damages, losses, and claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties.

**Material Modification** shall mean those modifications that have a material impact on the cost or timing of any Interconnection Request or any other valid interconnection request with a later queue priority date.

**Metering Equipment** shall mean all metering equipment installed or to be installed for measuring the output of the Generating Facility pursuant to this LGIA at the metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

**NERC** shall mean the North American Electric Reliability Council or its successor organization.

**Network Upgrades** shall be Participating TO's Delivery Network Upgrades and Participating TO's Reliability Network Upgrades.

**Operational Control** shall mean the rights of the CAISO under the Transmission Control Agreement and the CAISO Tariff to direct the parties to the Transmission Control Agreement how to operate their transmission lines and facilities and other electric plant affecting the reliability of those lines and facilities for the purpose of affording comparable non-discriminatory transmission access and meeting applicable reliability criteria.

**Participating TO's Delivery Network Upgrades** shall mean the additions, modifications, and upgrades to the Participating TO's Transmission System at or beyond the Point of Interconnection, other than Reliability Network Upgrades, identified in the Interconnection Studies, as identified in Appendix A, to relieve constraints on the CAISO Controlled Grid.

**Participating TO's Interconnection Facilities** shall mean all facilities and equipment owned, controlled or operated by the Participating TO from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to this LGIA, including any modifications, additions or upgrades to such facilities and equipment. Participating TO's Interconnection Facilities are sole use

facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Participating TO's Reliability Network Upgrades** shall mean the additions, modifications, and upgrades to the Participating TO's Transmission System at or beyond the Point of Interconnection, identified in the Interconnection Studies, as identified in Appendix A, necessary to interconnect the Large Generating Facility safely and reliably to the Participating TO's Transmission System, which would not have been necessary but for the interconnection of the Large Generating Facility, including additions, modifications, and upgrades necessary to remedy short circuit or stability problems resulting from the interconnection of the Large Generating Facility to the Participating TO's Transmission System. Participating TO's Reliability Network Upgrades also include, consistent with Applicable Reliability Standards and Applicable Reliability Council practice, the Participating TO's facilities necessary to mitigate any adverse impact the Large Generating Facility's interconnection may have on a path's Applicable Reliability Council rating. Participating TO's Reliability Network Upgrades do not include any Participating TO's Delivery Network Upgrades.

**Participating TO's Transmission System** shall mean the facilities owned and operated by the Participating TO and that have been placed under the CAISO's Operational Control, which facilities form part of the CAISO Controlled Grid.

**Party or Parties** shall mean the Participating TO, CAISO, Interconnection Customer or the applicable combination of the above.

**Phase I Interconnection Study** shall mean the engineering study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), that evaluates the impact of the proposed interconnection on the safety and reliability of the Participating TO's Transmission System and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility(ies) were interconnected without identified project modifications or system modifications, as provided in the On-Peak Deliverability Assessment (as defined in the CAISO Tariff), and other potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Large Generator Interconnection Procedures. The study will also identify the approximate total costs, based on per unit costs, of mitigating these impacts, along with an equitable allocation of those costs to Interconnection Customers for their individual Generating Facilities.

**Phase II Interconnection Study** shall mean an engineering and operational study conducted or caused to be performed by the CAISO once per calendar year, in coordination with the applicable Participating TO(s), to determine the Point of Interconnection and a list of facilities (including the Participating TO's Interconnection Facilities, Network Upgrades, Distribution Upgrades, and Stand Alone Network Upgrades), the cost of those facilities, and the time required to interconnect the Generating Facility(ies) with the Participating TO's Transmission System.

**Point of Change of Ownership** shall mean the point, as set forth in Appendix A to this LGIA, where the Interconnection Customer's Interconnection Facilities connect to the Participating TO's Interconnection Facilities.

**Point of Interconnection** shall mean the point, as set forth in Appendix A to this LGIA, where the Interconnection Facilities connect to the Participating TO's Transmission System.

**QF PGA** shall mean a Qualifying Facility Participating Generator Agreement specifying the special provisions for the operating relationship between a Qualifying Facility and the CAISO, a pro forma version of which is set forth in Appendix B.3 of the CAISO Tariff.

**Qualifying Facility** shall mean a qualifying cogeneration facility or qualifying small power production facility, as defined in the Code of Federal Regulations, Title 18, Part 292 (18 C.F.R. §292).

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under this LGIA, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Scoping Meeting** shall mean the meeting among representatives of the Interconnection Customer, the Participating TO(s), other Affected Systems, and the CAISO conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

**Stand Alone Network Upgrades** shall mean Network Upgrades that the Interconnection Customer may construct without affecting day-to-day operations of the CAISO Controlled Grid or Affected Systems during their construction. The Participating TO, the CAISO, and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to this LGIA.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, that protects (1) the Participating TO's Transmission System, Participating TO's Interconnection Facilities, CAISO Controlled Grid, and Affected Systems from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the CAISO Controlled Grid, Participating TO's Interconnection Facilities, and Affected Systems or on other delivery systems or other generating systems to which the CAISO Controlled Grid is directly connected.

**Transmission Control Agreement** shall mean CAISO FERC Electric Tariff No. 7.

**Trial Operation** shall mean the period during which the Interconnection Customer is engaged in on-site test operations and commissioning of an Electric Generating Unit prior to Commercial Operation.

## **ARTICLE 2. EFFECTIVE DATE, TERM AND TERMINATION**

**2.1 Effective Date.** This LGIA shall become effective upon execution by all Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by FERC. The CAISO and Participating TO shall promptly file this LGIA with FERC upon execution in accordance with Article 3.1, if required.

**2.2 Term of Agreement.** Subject to the provisions of Article 2.3, this LGIA shall remain in effect for a period of \_\_\_\_\_ years from the Effective Date (Term Specified in Individual Agreements to be ten (10) years or such other longer period as the Interconnection Customer may request) and shall be automatically renewed for each successive one-year period thereafter.

### **2.3 Termination Procedures.**

**2.3.1 Written Notice.** This LGIA may be terminated by the Interconnection Customer after giving the CAISO and the Participating TO ninety (90) Calendar Days advance written notice, or by the CAISO and the Participating TO notifying FERC after the Generating Facility permanently ceases Commercial Operation.

**2.3.2 Default.** A Party may terminate this LGIA in accordance with Article 17.

**2.3.3 Suspension of Work.** This LGIA may be deemed terminated in accordance with Article 5.16.

**2.3.4** Notwithstanding Articles 2.3.1, 2.3.2, and 2.3.3, no termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to

such termination, including the filing with FERC of a notice of termination of this LGIA (if applicable), which notice has been accepted for filing by FERC, and the Interconnection Customer has fulfilled its termination cost obligations under Article 2.4.

**2.4 Termination Costs.** Immediately upon the other Parties' receipt of a notice of the termination of this LGIA pursuant to Article 2.3 above, the CAISO and the Participating TO will determine the total cost responsibility of the Interconnection Customer. If, as of the date of the other Parties' receipt of the notice of termination, the Interconnection Customer has not already paid its share of Network Upgrade costs, as set forth in Appendix G to this LGIA, the Participating TO will liquidate the Interconnection Customer's Interconnection Financial Security associated with its cost responsibility for Network Upgrades, in accordance with Section 9.4 of the LGIP.

The Interconnection Customer will also be responsible for all costs incurred or irrevocably committed to be incurred in association with the construction of the Participating TO's Interconnection Facilities (including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment) and other such expenses, including any Distribution Upgrades for which the Participating TO or CAISO has incurred expenses or has irrevocably committed to incur expenses and has not been reimbursed by the Interconnection Customer, as of the date of the other Parties' receipt of the notice of termination, subject to the limitations set forth in this Article 2.4. Nothing in this Article 2.4 shall limit the Parties' rights under Article 17. If, as of the date of the other Parties' receipt of the notice of termination, the Interconnection Customer has not already reimbursed the Participating TO and the CAISO for costs incurred to construct the Participating TO's Interconnection Facilities, the Participating TO will liquidate the Interconnection Customer's Interconnection Financial Security associated with the construction of the Participating TO's Interconnection Facilities, in accordance with Section 9.4 of the LGIP. If the amount of the Interconnection Financial Security liquidated by the Participating TO under this Article 2.4 is insufficient to compensate the CAISO and the Participating TO for actual costs associated with the construction of the Participating TO's Interconnection Facilities contemplated in this Article, any additional amounts will be the responsibility of the Interconnection Customer, subject to the provisions of Section 9.4 of the LGIP. Any such additional amounts due from the Interconnection Customer beyond the amounts covered by its Interconnection Financial Security will be due to the Participating TO immediately upon termination of this LGIA in accordance with Section 9.4 of the LGIP.

If the amount of the Interconnection Financial Security exceeds the Interconnection Customer's cost responsibility under Section 9.4 of the LGIP, any excess amount will be released to the Interconnection Customer in accordance with Section 9.4 of the LGIP.

**2.4.1** Notwithstanding the foregoing, in the event of termination by a Party, all Parties shall use commercially Reasonable Efforts to mitigate the costs, damages and charges arising as a consequence of termination. With respect to any portion of the Participating TO's Interconnection Facilities that have not yet been constructed or installed, the Participating TO shall to the extent possible and with the Interconnection Customer's authorization cancel any pending orders of, or return, any materials or equipment for, or contracts for construction of, such facilities; provided that in the event the Interconnection Customer elects not to authorize such cancellation, the Interconnection Customer shall assume all payment obligations with respect to such materials, equipment, and contracts, and the Participating TO shall deliver such material and equipment, and, if necessary, assign such contracts, to the Interconnection Customer as soon as practicable, at the Interconnection Customer's expense. To the extent that the Interconnection Customer has already paid the Participating TO for any or all such costs of materials or equipment not taken by the Interconnection Customer, the Participating TO shall promptly refund such amounts to the Interconnection Customer, less any costs, including penalties, incurred by the Participating TO to cancel any pending orders of or return such materials, equipment, or contracts.

- 2.4.2** The Participating TO may, at its option, retain any portion of such materials, equipment, or facilities that the Interconnection Customer chooses not to accept delivery of, in which case the Participating TO shall be responsible for all costs associated with procuring such materials, equipment, or facilities.
- 2.4.3** With respect to any portion of the Interconnection Facilities, and any other facilities already installed or constructed pursuant to the terms of this LGIA, Interconnection Customer shall be responsible for all costs associated with the removal, relocation or other disposition or retirement of such materials, equipment, or facilities.
- 2.5** **Disconnection.** Upon termination of this LGIA, the Parties will take all appropriate steps to disconnect the Large Generating Facility from the Participating TO's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this LGIA or such non-terminating Party otherwise is responsible for these costs under this LGIA.
- 2.6** **Survival.** This LGIA shall continue in effect after termination to the extent necessary to provide for final billings and payments and for costs incurred hereunder, including billings and payments pursuant to this LGIA; to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this LGIA was in effect; and to permit each Party to have access to the lands of the other Parties pursuant to this LGIA or other applicable agreements, to disconnect, remove or salvage its own facilities and equipment.

### **ARTICLE 3. REGULATORY FILINGS AND CAISO TARIFF COMPLIANCE**

- 3.1** **Filing.** The Participating TO and the CAISO shall file this LGIA (and any amendment hereto) with the appropriate Governmental Authority(ies), if required. The Interconnection Customer may request that any information so provided be subject to the confidentiality provisions of Article 22. If the Interconnection Customer has executed this LGIA, or any amendment thereto, the Interconnection Customer shall reasonably cooperate with the Participating TO and CAISO with respect to such filing and to provide any information reasonably requested by the Participating TO or CAISO needed to comply with applicable regulatory requirements.
- 3.2** **Agreement Subject to CAISO Tariff.** The Interconnection Customer will comply with all applicable provisions of the CAISO Tariff, including the LGIP.
- 3.3** **Relationship Between this LGIA and the CAISO Tariff.** With regard to rights and obligations between the Participating TO and the Interconnection Customer, if and to the extent a matter is specifically addressed by a provision of this LGIA (including any appendices, schedules or other attachments to this LGIA), the provisions of this LGIA shall govern. If and to the extent a provision of this LGIA is inconsistent with the CAISO Tariff and dictates rights and obligations between the CAISO and the Participating TO or the CAISO and the Interconnection Customer, the CAISO Tariff shall govern.
- 3.4** **Relationship Between this LGIA and the QF PGA.** With regard to the rights and obligations of a Qualifying Facility that has entered into a QF PGA with the CAISO and has entered into this LGIA, if and to the extent a matter is specifically addressed by a provision of the QF PGA that is inconsistent with this LGIA, the terms of the QF PGA shall govern.

### **ARTICLE 4. SCOPE OF SERVICE**

- 4.1** **Interconnection Service.** Interconnection Service allows the Interconnection Customer to connect the Large Generating Facility to the Participating TO's Transmission System and be eligible to deliver the Large Generating Facility's output using the available capacity of the CAISO

Controlled Grid. To the extent the Interconnection Customer wants to receive Interconnection Service, the Participating TO shall construct facilities identified in Appendices A and C that the Participating TO is responsible to construct.

Interconnection Service does not necessarily provide the Interconnection Customer with the capability to physically deliver the output of its Large Generating Facility to any particular load on the CAISO Controlled Grid without incurring congestion costs. In the event of transmission constraints on the CAISO Controlled Grid, the Interconnection Customer's Large Generating Facility shall be subject to the applicable congestion management procedures in the CAISO Tariff in the same manner as all other resources.

**4.2 Provision of Service.** The Participating TO and the CAISO shall provide Interconnection Service for the Large Generating Facility.

**4.3 Performance Standards.** Each Party shall perform all of its obligations under this LGIA in accordance with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice, and to the extent a Party is required or prevented or limited in taking any action by such regulations and standards, such Party shall not be deemed to be in Breach of this LGIA for its compliance therewith. If such Party is the CAISO or Participating TO, then that Party shall amend the LGIA and submit the amendment to FERC for approval.

**4.4 No Transmission Service.** The execution of this LGIA does not constitute a request for, nor the provision of, any transmission service under the CAISO Tariff, and does not convey any right to deliver electricity to any specific customer or point of delivery.

**4.5 Interconnection Customer Provided Services.** The services provided by Interconnection Customer under this LGIA are set forth in Article 9.6 and Article 13.5.1. Interconnection Customer shall be paid for such services in accordance with Article 11.6.

## **ARTICLE 5. INTERCONNECTION FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION**

Interconnection Facilities, Network Upgrades, and Distribution Upgrades shall be studied, designed, and constructed pursuant to Good Utility Practice. Such studies, design and construction shall be based on the assumed accuracy and completeness of all technical information received by the Participating TO and the CAISO from the Interconnection Customer associated with interconnecting the Large Generating Facility.

**5.1 Options.** Unless otherwise mutually agreed among the Parties, the Interconnection Customer shall select the In-Service Date, Initial Synchronization Date, and Commercial Operation Date; and either Standard Option or Alternate Option set forth below for completion of the Participating TO's Interconnection Facilities and Network Upgrades as set forth in Appendix A, Interconnection Facilities, Network Upgrades, and Distribution Upgrades, and such dates and selected option shall be set forth in Appendix B, Milestones.

**5.1.1 Standard Option.** The Participating TO shall design, procure, and construct the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, using Reasonable Efforts to complete the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades by the dates set forth in Appendix B, Milestones. The Participating TO shall not be required to undertake any action which is inconsistent with its standard safety practices, its material and equipment specifications, its design criteria and construction procedures, its labor agreements, and Applicable Laws and Regulations. In the event the Participating TO reasonably expects that it will not be able to complete the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades by the specified dates, the Participating



TO shall promptly provide written notice to the Interconnection Customer and the CAISO and shall undertake Reasonable Efforts to meet the earliest dates thereafter.

**5.1.2 Alternate Option.** If the dates designated by the Interconnection Customer are acceptable to the Participating TO, the Participating TO shall so notify the Interconnection Customer within thirty (30) Calendar Days, and shall assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities by the designated dates.

If the Participating TO subsequently fails to complete the Participating TO's Interconnection Facilities by the In-Service Date, to the extent necessary to provide back feed power; or fails to complete Network Upgrades by the Initial Synchronization Date to the extent necessary to allow for Trial Operation at full power output, unless other arrangements are made by the Parties for such Trial Operation; or fails to complete the Network Upgrades by the Commercial Operation Date, as such dates are reflected in Appendix B, Milestones; the Participating TO shall pay the Interconnection Customer liquidated damages in accordance with Article 5.3, Liquidated Damages, provided, however, the dates designated by the Interconnection Customer shall be extended day for day for each day that the CAISO refuses to grant clearances to install equipment.

**5.1.3 Option to Build.** If the dates designated by the Interconnection Customer are not acceptable to the Participating TO, the Participating TO shall so notify the Interconnection Customer within thirty (30) Calendar Days, and unless the Parties agree otherwise, the Interconnection Customer shall have the option to assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades. If the Interconnection Customer elects to exercise its option to assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, it shall so notify the Participating TO within thirty (30) Calendar Days of receipt of the Participating TO's notification that the designated dates are not acceptable to the Participating TO. The Participating TO, CAISO, and Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Appendix A to this LGIA. Except for Stand Alone Network Upgrades, the Interconnection Customer shall have no right to construct Network Upgrades under this option.

**5.1.4 Negotiated Option.** If the Interconnection Customer elects not to exercise its option under Article 5.1.3, Option to Build, the Interconnection Customer shall so notify the Participating TO within thirty (30) Calendar Days of receipt of the Participating TO's notification that the designated dates are not acceptable to the Participating TO, and the Parties shall in good faith attempt to negotiate terms and conditions (including revision of the specified dates and liquidated damages, the provision of incentives or the procurement and construction of a portion of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades by the Interconnection Customer) pursuant to which the Participating TO is responsible for the design, procurement and construction of the Participating TO's Interconnection Facilities and Network Upgrades. If the Parties are unable to reach agreement on such terms and conditions, the Participating TO shall assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Network Upgrades pursuant to Article 5.1.1, Standard Option.

**5.2 General Conditions Applicable to Option to Build.** If the Interconnection Customer assumes responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades,

(1) the Interconnection Customer shall engineer, procure equipment, and construct the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by the Participating TO;

(2) The Interconnection Customer's engineering, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law to which the Participating TO would be subject in the engineering, procurement or construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

(3) the Participating TO shall review, and the Interconnection Customer shall obtain the Participating TO's approval of, the engineering design, equipment acceptance tests, and the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, which approval shall not be unreasonably withheld, and the CAISO may, at its option, review the engineering design, equipment acceptance tests, and the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

(4) prior to commencement of construction, the Interconnection Customer shall provide to the Participating TO, with a copy to the CAISO for informational purposes, a schedule for construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, and shall promptly respond to requests for information from the Participating TO;

(5) at any time during construction, the Participating TO shall have the right to gain unrestricted access to the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;

(6) at any time during construction, should any phase of the engineering, equipment procurement, or construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by the Participating TO, the Interconnection Customer shall be obligated to remedy deficiencies in that portion of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

(7) the Interconnection Customer shall indemnify the CAISO and Participating TO for claims arising from the Interconnection Customer's construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to Article 18.1 Indemnity;

(8) The Interconnection Customer shall transfer control of the Participating TO's Interconnection Facilities to the Participating TO and shall transfer Operational Control of Stand Alone Network Upgrades to the CAISO;

(9) Unless the Parties otherwise agree, the Interconnection Customer shall transfer ownership of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the Participating TO. As soon as reasonably practicable, but within twelve months after completion of the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, the Interconnection Customer shall provide an invoice of the final cost of the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the Participating TO, which invoice shall set forth such costs in sufficient detail to enable the Participating TO to reflect the proper costs of such facilities in its transmission rate base and to identify the investment upon which refunds will be provided;

(10) the Participating TO shall accept for operation and maintenance the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2; and

(11) The Interconnection Customer's engineering, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of the "Option to Build" conditions set forth in Appendix C. Interconnection Customer shall deliver to the Participating TO "as-built" drawings, information, and any other documents that are reasonably required by the Participating TO to assure that the Interconnection Facilities and Stand-Alone Network Upgrades are built to the standards and specifications required by the Participating TO.

**5.3 Liquidated Damages.** The actual damages to the Interconnection Customer, in the event the Participating TO's Interconnection Facilities or Network Upgrades are not completed by the dates designated by the Interconnection Customer and accepted by the Participating TO pursuant to subparagraphs 5.1.2 or 5.1.4, above, may include Interconnection Customer's fixed operation and maintenance costs and lost opportunity costs. Such actual damages are uncertain and impossible to determine at this time. Because of such uncertainty, any liquidated damages paid by the Participating TO to the Interconnection Customer in the event that the Participating TO does not complete any portion of the Participating TO's Interconnection Facilities or Network Upgrades by the applicable dates, shall be an amount equal to ½ of 1 percent per day of the actual cost of the Participating TO's Interconnection Facilities and Network Upgrades, in the aggregate, for which the Participating TO has assumed responsibility to design, procure and construct.

However, in no event shall the total liquidated damages exceed 20 percent of the actual cost of the Participating TO's Interconnection Facilities and Network Upgrades for which the Participating TO has assumed responsibility to design, procure, and construct. The foregoing payments will be made by the Participating TO to the Interconnection Customer as just compensation for the damages caused to the Interconnection Customer, which actual damages are uncertain and impossible to determine at this time, and as reasonable liquidated damages, but not as a penalty or a method to secure performance of this LGIA. Liquidated damages, when the Parties agree to them, are the exclusive remedy for the Participating TO's failure to meet its schedule.

No liquidated damages shall be paid to the Interconnection Customer if: (1) the Interconnection Customer is not ready to commence use of the Participating TO's Interconnection Facilities or Network Upgrades to take the delivery of power for the Electric Generating Unit's Trial Operation or to export power from the Electric Generating Unit on the specified dates, unless the Interconnection Customer would have been able to commence use of the Participating TO's Interconnection Facilities or Network Upgrades to take the delivery of power for Electric Generating Unit's Trial Operation or to export power from the Electric Generating Unit, but for the Participating TO's delay; (2) the Participating TO's failure to meet the specified dates is the result of the action or inaction of the Interconnection Customer or any other interconnection customer who has entered into an interconnection agreement with the CAISO and/or Participating TO, action or inaction by the CAISO, or any cause beyond the Participating TO's reasonable control or reasonable ability to cure; (3) the Interconnection Customer has assumed responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades; or (4) the Parties have otherwise agreed.

In no event shall the CAISO have any responsibility or liability to the Interconnection Customer for liquidated damages pursuant to the provisions of this Article 5.3.

**5.4 Power System Stabilizers.** The Interconnection Customer shall procure, install, maintain and operate Power System Stabilizers in accordance with Applicable Reliability Standards, the guidelines and procedures established by the Applicable Reliability Council, and the provisions of Section 4.6.5.1 of the CAISO Tariff. The CAISO reserves the right to establish reasonable

minimum acceptable settings for any installed Power System Stabilizers, subject to the design and operating limitations of the Large Generating Facility. If the Large Generating Facility's Power System Stabilizers are removed from service or not capable of automatic operation, the Interconnection Customer shall immediately notify the CAISO and the Participating TO and restore the Power System Stabilizers to operation as soon as possible. The CAISO shall have the right to order the reduction in output or disconnection of the Large Generating Facility if the reliability of the CAISO Controlled Grid would be adversely affected as a result of improperly tuned Power System Stabilizers. The requirements of this Article 5.4 shall not apply to wind generators of the induction type.

**5.5 Equipment Procurement.** If responsibility for construction of the Participating TO's Interconnection Facilities or Network Upgrades is to be borne by the Participating TO, then the Participating TO shall commence design of the Participating TO's Interconnection Facilities or Network Upgrades and procure necessary equipment as soon as practicable after all of the following conditions are satisfied, unless the Parties otherwise agree in writing:

**5.5.1** The CAISO, in coordination with the applicable Participating TO(s), has completed the Phase II Interconnection Study pursuant to the Large Generator Interconnection Facilities Study Process Agreement;

**5.5.2** The Participating TO has received written authorization to proceed with design and procurement from the Interconnection Customer by the date specified in Appendix B, Milestones; and

**5.5.3** The Interconnection Customer has provided security to the Participating TO in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.

**5.6 Construction Commencement.** The Participating TO shall commence construction of the Participating TO's Interconnection Facilities and Network Upgrades for which it is responsible as soon as practicable after the following additional conditions are satisfied:

**5.6.1** Approval of the appropriate Governmental Authority has been obtained for any facilities requiring regulatory approval;

**5.6.2** Necessary real property rights and rights-of-way have been obtained, to the extent required for the construction of a discrete aspect of the Participating TO's Interconnection Facilities and Network Upgrades;

**5.6.3** The Participating TO has received written authorization to proceed with construction from the Interconnection Customer by the date specified in Appendix B, Milestones; and

**5.6.4** The Interconnection Customer has provided payment and security to the Participating TO in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.

**5.7 Work Progress.** The Parties will keep each other advised periodically as to the progress of their respective design, procurement and construction efforts. Any Party may, at any time, request a progress report from another Party. If, at any time, the Interconnection Customer determines that the completion of the Participating TO's Interconnection Facilities will not be required until after the specified In-Service Date, the Interconnection Customer will provide written notice to the Participating TO and CAISO of such later date upon which the completion of the Participating TO's Interconnection Facilities will be required.

**5.8 Information Exchange.** As soon as reasonably practicable after the Effective Date, the Parties shall exchange information regarding the design and compatibility of the Interconnection Customer's Interconnection Facilities and Participating TO's Interconnection Facilities and

compatibility of the Interconnection Facilities with the Participating TO's Transmission System, and shall work diligently and in good faith to make any necessary design changes.

**5.9 Limited Operation.** If any of the Participating TO's Interconnection Facilities or Network Upgrades are not reasonably expected to be completed prior to the Commercial Operation Date of the Electric Generating Unit, the Participating TO and/or CAISO, as applicable, shall, upon the request and at the expense of the Interconnection Customer, perform operating studies on a timely basis to determine the extent to which the Electric Generating Unit and the Interconnection Customer's Interconnection Facilities may operate prior to the completion of the Participating TO's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and this LGIA. The Participating TO and CAISO shall permit Interconnection Customer to operate the Electric Generating Unit and the Interconnection Customer's Interconnection Facilities in accordance with the results of such studies.

**5.10 Interconnection Customer's Interconnection Facilities.** The Interconnection Customer shall, at its expense, design, procure, construct, own and install the Interconnection Customer's Interconnection Facilities, as set forth in Appendix A.

**5.10.1 Large Generating Facility and Interconnection Customer's Interconnection**

**Facilities Specifications.** In addition to the Interconnection Customer's responsibility to submit technical data with its Interconnection Request as required by Section 3.5.1 of the LGIP, the Interconnection Customer shall submit all remaining necessary specifications for the Interconnection Customer's Interconnection Facilities and Large Generating Facility, including System Protection Facilities, to the Participating TO and the CAISO at least one hundred eighty (180) Calendar Days prior to the Initial Synchronization Date; and final specifications for review and comment at least ninety (90) Calendar Days prior to the Initial Synchronization Date. The Participating TO and the CAISO shall review such specifications pursuant to this LGIA and the LGIP to ensure that the Interconnection Customer's Interconnection Facilities and Large Generating Facility are compatible with the technical specifications, operational control, safety requirements, and any other applicable requirements of the Participating TO and the CAISO and comment on such specifications within thirty (30) Calendar Days of the Interconnection Customer's submission. All specifications provided hereunder shall be deemed confidential.

**5.10.2 Participating TO's and CAISO's Review.** The Participating TO's and the CAISO's review of the Interconnection Customer's final specifications shall not be construed as confirming, endorsing, or providing a warranty as to the design, fitness, safety, durability or reliability of the Large Generating Facility, or the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall make such changes to the Interconnection Customer's Interconnection Facilities as may reasonably be required by the Participating TO or the CAISO, in accordance with Good Utility Practice, to ensure that the Interconnection Customer's Interconnection Facilities are compatible with the technical specifications, Operational Control, and safety requirements of the Participating TO or the CAISO.

**5.10.3 Interconnection Customer's Interconnection Facilities Construction.** The Interconnection Customer's Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Participating TO and Interconnection Customer agree on another mutually acceptable deadline, the Interconnection Customer shall deliver to the Participating TO and CAISO "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities and the Electric Generating Unit(s), such as: a one-line diagram, a site plan showing the Large Generating Facility and the Interconnection Customer's Interconnection Facilities, plan and elevation drawings showing the layout of the

Interconnection Customer's Interconnection Facilities, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with the Interconnection Customer's step-up transformers, the facilities connecting the Large Generating Facility to the step-up transformers and the Interconnection Customer's Interconnection Facilities, and the impedances (determined by factory tests) for the associated step-up transformers and the Electric Generating Units. The Interconnection Customer shall provide the Participating TO and the CAISO specifications for the excitation system, automatic voltage regulator, Large Generating Facility control and protection settings, transformer tap settings, and communications, if applicable. Any deviations from the relay settings, machine specifications, and other specifications originally submitted by the Interconnection Customer shall be assessed by the Participating TO and the CAISO pursuant to the appropriate provisions of this LGIA and the LGIP.

**5.10.4 Interconnection Customer to Meet Requirements of the Participating TO's Interconnection Handbook.** The Interconnection Customer shall comply with the Participating TO's Interconnection Handbook.

**5.11 Participating TO's Interconnection Facilities Construction.** The Participating TO's Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Upon request, within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Participating TO and Interconnection Customer agree on another mutually acceptable deadline, the Participating TO shall deliver to the Interconnection Customer and the CAISO the following "as-built" drawings, information and documents for the Participating TO's Interconnection Facilities [include appropriate drawings and relay diagrams].

The Participating TO will obtain control for operating and maintenance purposes of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades upon completion of such facilities. Pursuant to Article 5.2, the CAISO will obtain Operational Control of the Stand Alone Network Upgrades prior to the Commercial Operation Date.

**5.12 Access Rights.** Upon reasonable notice and supervision by a Party, and subject to any required or necessary regulatory approvals, a Party ("Granting Party") shall furnish at no cost to the other Party ("Access Party") any rights of use, licenses, rights of way and easements with respect to lands owned or controlled by the Granting Party, its agents (if allowed under the applicable agency agreement), or any Affiliate, that are necessary to enable the Access Party to obtain ingress and egress to construct, operate, maintain, repair, test (or witness testing), inspect, replace or remove facilities and equipment to: (i) interconnect the Large Generating Facility with the Participating TO's Transmission System; (ii) operate and maintain the Large Generating Facility, the Interconnection Facilities and the Participating TO's Transmission System; and (iii) disconnect or remove the Access Party's facilities and equipment upon termination of this LGIA. In exercising such licenses, rights of way and easements, the Access Party shall not unreasonably disrupt or interfere with normal operation of the Granting Party's business and shall adhere to the safety rules and procedures established in advance, as may be changed from time to time, by the Granting Party and provided to the Access Party.

**5.13 Lands of Other Property Owners.** If any part of the Participating TO's Interconnection Facilities and/or Network Upgrades are to be installed on property owned by persons other than the Interconnection Customer or Participating TO, the Participating TO shall at the Interconnection Customer's expense use efforts, similar in nature and extent to those that it typically undertakes on its own behalf or on behalf of its Affiliates, including use of its eminent domain authority, and to the extent consistent with state law, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove the Participating TO's Interconnection Facilities and/or Network Upgrades upon such property.

**5.14 Permits.** Participating TO and Interconnection Customer shall cooperate with each other in good faith in obtaining all permits, licenses and authorization that are necessary to accomplish the interconnection in compliance with Applicable Laws and Regulations. With respect to this paragraph, the Participating TO shall provide permitting assistance to the Interconnection Customer comparable to that provided to the Participating TO's own, or an Affiliate's generation.

**5.15 Early Construction of Base Case Facilities.** The Interconnection Customer may request the Participating TO to construct, and the Participating TO shall construct, using Reasonable Efforts to accommodate Interconnection Customer's In-Service Date, all or any portion of any Network Upgrades required for Interconnection Customer to be interconnected to the Participating TO's Transmission System which are included in the Base Case of the Interconnection Studies for the Interconnection Customer, and which also are required to be constructed for another interconnection customer, but where such construction is not scheduled to be completed in time to achieve Interconnection Customer's In-Service Date.

**5.16 Suspension.** The Interconnection Customer reserves the right, upon written notice to the Participating TO and the CAISO, to suspend at any time all work associated with the construction and installation of the Participating TO's Interconnection Facilities, Network Upgrades, and/or Distribution Upgrades required under this LGIA, other than Network Upgrades identified in the Phase II Interconnection Study as common to multiple Generating Facilities, with the condition that the Participating TO's electrical system and the CAISO Controlled Grid shall be left in a safe and reliable condition in accordance with Good Utility Practice and the Participating TO's safety and reliability criteria and the CAISO's Applicable Reliability Standards. In such event, the Interconnection Customer shall be responsible for all reasonable and necessary costs which the Participating TO (i) has incurred pursuant to this LGIA prior to the suspension and (ii) incurs in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Participating TO's electric system during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and labor contracts which the Participating TO cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, the Participating TO shall obtain Interconnection Customer's authorization to do so.

The Participating TO shall invoice the Interconnection Customer for such costs pursuant to Article 12 and shall use due diligence to minimize its costs. In the event Interconnection Customer suspends work required under this LGIA pursuant to this Article 5.16, and has not requested the Participating TO to recommence the work or has not itself recommenced work required under this LGIA in time to ensure that the new projected Commercial Operation Date for the full Generating Facility Capacity of the Large Generating Facility is no more than three (3) years from the Commercial Operation Date identified in Appendix B hereto, this LGIA shall be deemed terminated and the Interconnection Customer's responsibility for costs will be determined in accordance with Section 2.4 of this LGIA. The suspension period shall begin on the date the suspension is requested, or the date of the written notice to the Participating TO and the CAISO, if no effective date is specified.

**5.17 Taxes.**

**5.17.1 Interconnection Customer Payments Not Taxable.** The Parties intend that all payments or property transfers made by the Interconnection Customer to the Participating TO for the installation of the Participating TO's Interconnection Facilities and the Network Upgrades shall be non-taxable, either as contributions to capital, or as a refundable advance, in accordance with the Internal Revenue Code and any applicable state income tax laws and shall not be taxable as contributions in aid of construction or otherwise under the Internal Revenue Code and any applicable state income tax laws.

**5.17.2 Representations And Covenants.** In accordance with IRS Notice 2001-82 and IRS Notice 88-129, the Interconnection Customer represents and covenants that (i) ownership of the electricity generated at the Large Generating Facility will pass to another party prior to the transmission of the electricity on the CAISO Controlled Grid, (ii) for income tax purposes, the amount of any payments and the cost of any property transferred to the Participating TO for the Participating TO's Interconnection Facilities will be capitalized by the Interconnection Customer as an intangible asset and recovered using the straight-line method over a useful life of twenty (20) years, and (iii) any portion of the Participating TO's Interconnection Facilities that is a "dual-use intertie," within the meaning of IRS Notice 88-129, is reasonably expected to carry only a de minimis amount of electricity in the direction of the Large Generating Facility. For this purpose, "de minimis amount" means no more than 5 percent of the total power flows in both directions, calculated in accordance with the "5 percent test" set forth in IRS Notice 88-129. This is not intended to be an exclusive list of the relevant conditions that must be met to conform to IRS requirements for non-taxable treatment.

At the Participating TO's request, the Interconnection Customer shall provide the Participating TO with a report from an independent engineer confirming its representation in clause (iii), above. The Participating TO represents and covenants that the cost of the Participating TO's Interconnection Facilities paid for by the Interconnection Customer without the possibility of refund or credit will have no net effect on the base upon which rates are determined.

**5.17.3 Indemnification for the Cost Consequence of Current Tax Liability Imposed Upon the Participating TO.** Notwithstanding Article 5.17.1, the Interconnection Customer shall protect, indemnify and hold harmless the Participating TO from the cost consequences of any current tax liability imposed against the Participating TO as the result of payments or property transfers made by the Interconnection Customer to the Participating TO under this LGIA for Interconnection Facilities, as well as any interest and penalties, other than interest and penalties attributable to any delay caused by the Participating TO.

The Participating TO shall not include a gross-up for the cost consequences of any current tax liability in the amounts it charges the Interconnection Customer under this LGIA unless (i) the Participating TO has determined, in good faith, that the payments or property transfers made by the Interconnection Customer to the Participating TO should be reported as income subject to taxation or (ii) any Governmental Authority directs the Participating TO to report payments or property as income subject to taxation; provided, however, that the Participating TO may require the Interconnection Customer to provide security for Interconnection Facilities, in a form reasonably acceptable to the Participating TO (such as a parental guarantee or a letter of credit), in an amount equal to the cost consequences of any current tax liability under this Article 5.17. The Interconnection Customer shall reimburse the Participating TO for such costs on a fully grossed-up basis, in accordance with Article 5.17.4, within thirty (30) Calendar Days of receiving written notification from the Participating TO of the amount due, including detail about how the amount was calculated.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten year testing period and the applicable statute of limitation, as it may be extended by the Participating TO upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event and the payment of any related indemnification obligations as contemplated by this Article 5.17.

**5.17.4 Tax Gross-Up Amount.** The Interconnection Customer's liability for the cost consequences of any current tax liability under this Article 5.17 shall be calculated on a fully grossed-up basis. Except as may otherwise be agreed to by the parties, this means that the Interconnection Customer will pay the Participating TO, in addition to the amount



paid for the Interconnection Facilities and Network Upgrades, an amount equal to (1) the current taxes imposed on the Participating TO ("Current Taxes") on the excess of (a) the gross income realized by the Participating TO as a result of payments or property transfers made by the Interconnection Customer to the Participating TO under this LGIA (without regard to any payments under this Article 5.17) (the "Gross Income Amount") over (b) the present value of future tax deductions for depreciation that will be available as a result of such payments or property transfers (the "Present Value Depreciation Amount"), plus (2) an additional amount sufficient to permit the Participating TO to receive and retain, after the payment of all Current Taxes, an amount equal to the net amount described in clause (1).

For this purpose, (i) Current Taxes shall be computed based on the Participating TO's composite federal and state tax rates at the time the payments or property transfers are received and the Participating TO will be treated as being subject to tax at the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting the Participating TO's anticipated tax depreciation deductions as a result of such payments or property transfers by the Participating TO's current weighted average cost of capital. Thus, the formula for calculating the Interconnection Customer's liability to the Participating TO pursuant to this Article 5.17.4 can be expressed as follows:  $(\text{Current Tax Rate} \times (\text{Gross Income Amount} - \text{Present Value of Tax Depreciation})) / (1 - \text{Current Tax Rate})$ . Interconnection Customer's estimated tax liability in the event taxes are imposed shall be stated in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades.

**5.17.5 Private Letter Ruling or Change or Clarification of Law.** At the Interconnection Customer's request and expense, the Participating TO shall file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by the Interconnection Customer to the Participating TO under this LGIA are subject to federal income taxation. The Interconnection Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of the Interconnection Customer's knowledge. The Participating TO and Interconnection Customer shall cooperate in good faith with respect to the submission of such request, provided, however, the Interconnection Customer and the Participating TO explicitly acknowledge (and nothing herein is intended to alter) Participating TO's obligation under law to certify that the facts presented in the ruling request are true, correct and complete.

The Participating TO shall keep the Interconnection Customer fully informed of the status of such request for a private letter ruling and shall execute either a privacy act waiver or a limited power of attorney, in a form acceptable to the IRS, that authorizes the Interconnection Customer to participate in all discussions with the IRS regarding such request for a private letter ruling. The Participating TO shall allow the Interconnection Customer to attend all meetings with IRS officials about the request and shall permit the Interconnection Customer to prepare the initial drafts of any follow-up letters in connection with the request.

**5.17.6 Subsequent Taxable Events.** If, within 10 years from the date on which the relevant Participating TO's Interconnection Facilities are placed in service, (i) the Interconnection Customer Breaches the covenants contained in Article 5.17.2, (ii) a "disqualification event" occurs within the meaning of IRS Notice 88-129, or (iii) this LGIA terminates and the Participating TO retains ownership of the Interconnection Facilities and Network Upgrades, the Interconnection Customer shall pay a tax gross-up for the cost consequences of any current tax liability imposed on the Participating TO, calculated using the methodology described in Article 5.17.4 and in accordance with IRS Notice 90-60.

**5.17.7 Contests.** In the event any Governmental Authority determines that the Participating TO's receipt of payments or property constitutes income that is subject to taxation, the Participating TO shall notify the Interconnection Customer, in writing, within thirty (30) Calendar Days of receiving notification of such determination by a Governmental Authority. Upon the timely written request by the Interconnection Customer and at the Interconnection Customer's sole expense, the Participating TO may appeal, protest, seek abatement of, or otherwise oppose such determination. Upon the Interconnection Customer's written request and sole expense, the Participating TO may file a claim for refund with respect to any taxes paid under this Article 5.17, whether or not it has received such a determination. The Participating TO reserve the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the selection of counsel and compromise or settlement of the claim, but the Participating TO shall keep the Interconnection Customer informed, shall consider in good faith suggestions from the Interconnection Customer about the conduct of the contest, and shall reasonably permit the Interconnection Customer or an Interconnection Customer representative to attend contest proceedings.

The Interconnection Customer shall pay to the Participating TO on a periodic basis, as invoiced by the Participating TO, the Participating TO's documented reasonable costs of prosecuting such appeal, protest, abatement or other contest, including any costs associated with obtaining the opinion of independent tax counsel described in this Article 5.17.7. The Participating TO may abandon any contest if the Interconnection Customer fails to provide payment to the Participating TO within thirty (30) Calendar Days of receiving such invoice.

At any time during the contest, the Participating TO may agree to a settlement either with the Interconnection Customer's consent or, if such consent is refused, after obtaining written advice from independent nationally-recognized tax counsel, selected by the Participating TO, but reasonably acceptable to the Interconnection Customer, that the proposed settlement represents a reasonable settlement given the hazards of litigation. The Interconnection Customer's obligation shall be based on the amount of the settlement agreed to by the Interconnection Customer, or if a higher amount, so much of the settlement that is supported by the written advice from nationally-recognized tax counsel selected under the terms of the preceding paragraph. The settlement amount shall be calculated on a fully grossed-up basis to cover any related cost consequences of the current tax liability. The Participating TO may also settle any tax controversy without receiving the Interconnection Customer's consent or any such written advice; however, any such settlement will relieve the Interconnection Customer from any obligation to indemnify the Participating TO for the tax at issue in the contest (unless the failure to obtain written advice is attributable to the Interconnection Customer's unreasonable refusal to the appointment of independent tax counsel).

**5.17.8 Refund.** In the event that (a) a private letter ruling is issued to the Participating TO which holds that any amount paid or the value of any property transferred by the Interconnection Customer to the Participating TO under the terms of this LGIA is not subject to federal income taxation, (b) any legislative change or administrative announcement, notice, ruling or other determination makes it reasonably clear to the Participating TO in good faith that any amount paid or the value of any property transferred by the Interconnection Customer to the Participating TO under the terms of this LGIA is not taxable to the Participating TO, (c) any abatement, appeal, protest, or other contest results in a determination that any payments or transfers made by the Interconnection Customer to the Participating TO are not subject to federal income tax, or (d) if the Participating TO receives a refund from any taxing authority for any overpayment of tax attributable to any payment or property transfer made by the Interconnection Customer to the Participating TO pursuant to this LGIA, the Participating TO shall promptly refund to the Interconnection Customer the following:

(i) any payment made by Interconnection Customer under this Article 5.17 for taxes that is attributable to the amount determined to be non-taxable, together with interest thereon,

(ii) interest on any amounts paid by the Interconnection Customer to the Participating TO for such taxes which the Participating TO did not submit to the taxing authority, calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date payment was made by the Interconnection Customer to the date the Participating TO refunds such payment to the Interconnection Customer, and

(iii) with respect to any such taxes paid by the Participating TO, any refund or credit the Participating TO receives or to which it may be entitled from any Governmental Authority, interest (or that portion thereof attributable to the payment described in clause (i), above) owed to the Participating TO for such overpayment of taxes (including any reduction in interest otherwise payable by the Participating TO to any Governmental Authority resulting from an offset or credit); provided, however, that the Participating TO will remit such amount promptly to the Interconnection Customer only after and to the extent that the Participating TO has received a tax refund, credit or offset from any Governmental Authority for any applicable overpayment of income tax related to the Participating TO's Interconnection Facilities.

The intent of this provision is to leave the Parties, to the extent practicable, in the event that no taxes are due with respect to any payment for Interconnection Facilities and Network Upgrades hereunder, in the same position they would have been in had no such tax payments been made.

**5.17.9 Taxes Other Than Income Taxes.** Upon the timely request by the Interconnection Customer, and at the Interconnection Customer's sole expense, the CAISO or Participating TO may appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against the CAISO or Participating TO for which the Interconnection Customer may be required to reimburse the CAISO or Participating TO under the terms of this LGIA. The Interconnection Customer shall pay to the Participating TO on a periodic basis, as invoiced by the Participating TO, the Participating TO's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. The Interconnection Customer, the CAISO, and the Participating TO shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by the Interconnection Customer to the CAISO or Participating TO for such taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, the Interconnection Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by the Participating TO.

**5.18 Tax Status.** Each Party shall cooperate with the others to maintain the other Parties' tax status. Nothing in this LGIA is intended to adversely affect the CAISO's or any Participating TO's tax exempt status with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds.

**5.19 Modification.**

**5.19.1 General.** The Interconnection Customer or the Participating TO may undertake modifications to its facilities, subject to the provisions of this LGIA and the CAISO Tariff.

If a Party plans to undertake a modification that reasonably may be expected to affect the other Parties' facilities, that Party shall provide to the other Parties sufficient information regarding such modification so that the other Parties may evaluate the potential impact of such modification prior to commencement of the work. Such information shall be deemed to be confidential hereunder and shall include information concerning the timing of such modifications and whether such modifications are expected to interrupt the flow of electricity from the Large Generating Facility. The Party desiring to perform such work shall provide the relevant drawings, plans, and specifications to the other Parties at least ninety (90) Calendar Days in advance of the commencement of the work or such shorter period upon which the Parties may agree, which agreement shall not unreasonably be withheld, conditioned or delayed.

In the case of Large Generating Facility modifications that do not require the Interconnection Customer to submit an Interconnection Request, the CAISO or Participating TO shall provide, within thirty (30) Calendar Days (or such other time as the Parties may agree), an estimate of any additional modifications to the CAISO Controlled Grid, Participating TO's Interconnection Facilities, Network Upgrades or Distribution Upgrades necessitated by such Interconnection Customer modification and a good faith estimate of the costs thereof. The Participating TO and the CAISO shall determine if a Large Generating Facility modification is a Material Modification in accordance with the LGIP.

**5.19.2 Standards.** Any additions, modifications, or replacements made to a Party's facilities shall be designed, constructed and operated in accordance with this LGIA and Good Utility Practice.

**5.19.3 Modification Costs.** The Interconnection Customer shall not be directly assigned the costs of any additions, modifications, or replacements that the Participating TO makes to the Participating TO's Interconnection Facilities or the Participating TO's Transmission System to facilitate the interconnection of a third party to the Participating TO's Interconnection Facilities or the Participating TO's Transmission System, or to provide transmission service to a third party under the CAISO Tariff. The Interconnection Customer shall be responsible for the costs of any additions, modifications, or replacements to the Interconnection Facilities that may be necessary to maintain or upgrade such Interconnection Facilities consistent with Applicable Laws and Regulations, Applicable Reliability Standards or Good Utility Practice.

## **ARTICLE 6. TESTING AND INSPECTION**

**6.1 Pre-Commercial Operation Date Testing and Modifications.** Prior to the Commercial Operation Date, the Participating TO shall test the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades and the Interconnection Customer shall test the Large Generating Facility and the Interconnection Customer's Interconnection Facilities to ensure their safe and reliable operation. Similar testing may be required after initial operation. Each Party shall make any modifications to its facilities that are found to be necessary as a result of such testing. The Interconnection Customer shall bear the cost of all such testing and modifications. The Interconnection Customer shall not commence initial parallel operation of an Electric Generating Unit with the Participating TO's Transmission System until the Participating TO provides prior written approval, which approval shall not be unreasonably withheld, for operation of such Electric Generating Unit. The Interconnection Customer shall generate test energy at the Large Generating Facility only if it has arranged for the delivery of such test energy.

**6.2 Post-Commercial Operation Date Testing and Modifications.** Each Party shall at its own expense perform routine inspection and testing of its facilities and equipment in accordance with Good Utility Practice as may be necessary to ensure the continued interconnection of the Large Generating Facility with the Participating TO's Transmission System in a safe and reliable

manner. Each Party shall have the right, upon advance written notice, to require reasonable additional testing of the other Party's facilities, at the requesting Party's expense, as may be in accordance with Good Utility Practice.

**6.3 Right to Observe Testing.** Each Party shall notify the other Parties at least fourteen (14) Calendar Days in advance of its performance of tests of its Interconnection Facilities or Generating Facility. The other Parties have the right, at their own expense, to observe such testing.

**6.4 Right to Inspect.** Each Party shall have the right, but shall have no obligation to: (i) observe another Party's tests and/or inspection of any of its System Protection Facilities and other protective equipment, including Power System Stabilizers; (ii) review the settings of another Party's System Protection Facilities and other protective equipment; and (iii) review another Party's maintenance records relative to the Interconnection Facilities, the System Protection Facilities and other protective equipment. A Party may exercise these rights from time to time as it deems necessary upon reasonable notice to the other Party. The exercise or non-exercise by a Party of any such rights shall not be construed as an endorsement or confirmation of any element or condition of the Interconnection Facilities or the System Protection Facilities or other protective equipment or the operation thereof, or as a warranty as to the fitness, safety, desirability, or reliability of same. Any information that a Party obtains through the exercise of any of its rights under this Article 6.4 shall be deemed to be Confidential Information and treated pursuant to Article 22 of this LGIA.

## **ARTICLE 7. METERING**

**7.1 General.** Each Party shall comply with any Applicable Reliability Standards and the Applicable Reliability Council requirements. The Interconnection Customer and CAISO shall comply with the provisions of the CAISO Tariff regarding metering, including Section 10 and the Metering Protocol of the CAISO Tariff. Unless otherwise agreed by the Participating TO and the Interconnection Customer, the Participating TO may install additional Metering Equipment at the Point of Interconnection prior to any operation of any Electric Generating Unit and shall own, operate, test and maintain such Metering Equipment. Power flows to and from the Large Generating Facility shall be measured at or, at the CAISO's or Participating TO's option for its respective Metering Equipment, compensated to, the Point of Interconnection. The CAISO shall provide metering quantities to the Interconnection Customer upon request in accordance with the CAISO Tariff by directly polling the CAISO's meter data acquisition system. The Interconnection Customer shall bear all reasonable documented costs associated with the purchase, installation, operation, testing and maintenance of the Metering Equipment.

**7.2 Check Meters.** The Interconnection Customer, at its option and expense, may install and operate, on its premises and on its side of the Point of Interconnection, one or more check meters to check the CAISO-pollled meters or the Participating TO's meters. Such check meters shall be for check purposes only and shall not be used for the measurement of power flows for purposes of this LGIA, except in the case that no other means are available on a temporary basis at the option of the CAISO or the Participating TO. The check meters shall be subject at all reasonable times to inspection and examination by the CAISO or Participating TO or their designees. The installation, operation and maintenance thereof shall be performed entirely by the Interconnection Customer in accordance with Good Utility Practice.

**7.3 Participating TO Retail Metering.** The Participating TO may install retail revenue quality meters and associated equipment, pursuant to the Participating TO's applicable retail tariffs.

## **ARTICLE 8. COMMUNICATIONS**

- 8.1 Interconnection Customer Obligations.** The Interconnection Customer shall maintain satisfactory operating communications with the CAISO in accordance with the provisions of the CAISO Tariff and with the Participating TO's dispatcher or representative designated by the Participating TO. The Interconnection Customer shall provide standard voice line, dedicated voice line and facsimile communications at its Large Generating Facility control room or central dispatch facility through use of either the public telephone system, or a voice communications system that does not rely on the public telephone system. The Interconnection Customer shall also provide the dedicated data circuit(s) necessary to provide Interconnection Customer data to the CAISO and Participating TO as set forth in Appendix D, Security Arrangements Details. The data circuit(s) shall extend from the Large Generating Facility to the location(s) specified by the CAISO and Participating TO. Any required maintenance of such communications equipment shall be performed by the Interconnection Customer. Operational communications shall be activated and maintained under, but not be limited to, the following events: system paralleling or separation, scheduled and unscheduled shutdowns, equipment clearances, and hourly and daily load data.
- 8.2 Remote Terminal Unit.** Prior to the Initial Synchronization Date of each Electric Generating Unit, a Remote Terminal Unit, or equivalent data collection and transfer equipment acceptable to the Parties, shall be installed by the Interconnection Customer, or by the Participating TO at the Interconnection Customer's expense, to gather accumulated and instantaneous data to be telemetered to the location(s) designated by the CAISO and by the Participating TO through use of a dedicated point-to-point data circuit(s) as indicated in Article 8.1.
- Telemetry to the CAISO shall be provided in accordance with the CAISO's technical standards for direct telemetry. For telemetry to the Participating TO, the communication protocol for the data circuit(s) shall be specified by the Participating TO. Instantaneous bi-directional real power and reactive power flow and any other required information must be telemetered directly to the location(s) specified by the Participating TO.
- Each Party will promptly advise the other Parties if it detects or otherwise learns of any metering, telemetry or communications equipment errors or malfunctions that require the attention and/or correction by another Party. The Party owning such equipment shall correct such error or malfunction as soon as reasonably feasible.
- 8.3 No Annexation.** Any and all equipment placed on the premises of a Party shall be and remain the property of the Party providing such equipment regardless of the mode and manner of annexation or attachment to real property, unless otherwise mutually agreed by the Parties.

## **ARTICLE 9. OPERATIONS**

- 9.1 General.** Each Party shall comply with Applicable Reliability Standards and the Applicable Reliability Council requirements. Each Party shall provide to the other Party all information that may reasonably be required by the other Party to comply with Applicable Laws and Regulations and Applicable Reliability Standards.
- 9.2 Balancing Authority Area Notification.** At least three months before Initial Synchronization Date, the Interconnection Customer shall notify the CAISO and Participating TO in writing of the Balancing Authority Area in which the Large Generating Facility intends to be located. If the Interconnection Customer intends to locate the Large Generating Facility in a Balancing Authority Area other than the Balancing Authority Area within whose electrically metered boundaries the Large Generating Facility is located, and if permitted to do so by the relevant transmission tariffs, all necessary arrangements, including but not limited to those set forth in Article 7 and Article 8 of this LGIA, and remote Balancing Authority Area generator interchange agreements, if applicable,

and the appropriate measures under such agreements, shall be executed and implemented prior to the placement of the Large Generating Facility in the other Balancing Authority Area.

**9.3 CAISO and Participating TO Obligations.** The CAISO and Participating TO shall cause the Participating TO's Transmission System to be operated and controlled in a safe and reliable manner and in accordance with this LGIA. The Participating TO at the Interconnection Customer's expense shall cause the Participating TO's Interconnection Facilities to be operated, maintained and controlled in a safe and reliable manner and in accordance with this LGIA. The CAISO and Participating TO may provide operating instructions to the Interconnection Customer consistent with this LGIA and Participating TO and CAISO operating protocols and procedures as they may change from time to time. The Participating TO and CAISO will consider changes to their operating protocols and procedures proposed by the Interconnection Customer.

**9.4 Interconnection Customer Obligations.** The Interconnection Customer shall at its own expense operate, maintain and control the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA. The Interconnection Customer shall operate the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in accordance with all applicable requirements of the Balancing Authority Area of which it is part, including such requirements as set forth in Appendix C, Interconnection Details, of this LGIA. Appendix C, Interconnection Details, will be modified to reflect changes to the requirements as they may change from time to time. A Party may request that another Party provide copies of the requirements set forth in Appendix C, Interconnection Details, of this LGIA. The Interconnection Customer shall not commence Commercial Operation of an Electric Generating Unit with the Participating TO's Transmission System until the Participating TO provides prior written approval, which approval shall not be unreasonably withheld, for operation of such Electric Generating Unit.

**9.5 Start-Up and Synchronization.** Consistent with the Parties' mutually acceptable procedures, the Interconnection Customer is responsible for the proper synchronization of each Electric Generating Unit to the CAISO Controlled Grid.

**9.6 Reactive Power.**

**9.6.1 Power Factor Design Criteria.** The Interconnection Customer shall design the Large Generating Facility to maintain a composite power delivery at continuous rated power output at the terminals of the Electric Generating Unit at a power factor within the range of 0.95 leading to 0.90 lagging, unless the CAISO has established different requirements that apply to all generators in the Balancing Authority Area on a comparable basis. Power factor design criteria for wind generators are provided in Appendix H of this LGIA.

**9.6.2 Voltage Schedules.** Once the Interconnection Customer has synchronized an Electric Generating Unit with the CAISO Controlled Grid, the CAISO or Participating TO shall require the Interconnection Customer to maintain a voltage schedule by operating the Electric Generating Unit to produce or absorb reactive power within the design limitations of the Electric Generating Unit set forth in Article 9.6.1 (Power Factor Design Criteria). CAISO's voltage schedules shall treat all sources of reactive power in the Balancing Authority Area in an equitable and not unduly discriminatory manner. The Participating TO shall exercise Reasonable Efforts to provide the Interconnection Customer with such schedules at least one (1) day in advance, and the CAISO or Participating TO may make changes to such schedules as necessary to maintain the reliability of the CAISO Controlled Grid or the Participating TO's electric system. The Interconnection Customer shall operate the Electric Generating Unit to maintain the specified output voltage or power factor within the design limitations of the Electric Generating Unit set forth in Article 9.6.1 (Power Factor Design Criteria), and as may be required by the CAISO to operate the Electric Generating Unit at a specific voltage schedule within the design limitations set forth in Article 9.6.1. If the Interconnection Customer is unable to maintain the

specified voltage or power factor, it shall promptly notify the CAISO and the Participating TO.

**9.6.2.1 Governors and Regulators.** Whenever an Electric Generating Unit is operated in parallel with the CAISO Controlled Grid and the speed governors (if installed on the Electric Generating Unit pursuant to Good Utility Practice) and voltage regulators are capable of operation, the Interconnection Customer shall operate the Electric Generating Unit with its speed governors and voltage regulators in automatic operation. If the Electric Generating Unit's speed governors and voltage regulators are not capable of such automatic operation, the Interconnection Customer shall immediately notify the CAISO and the Participating TO and ensure that the Electric Generating Unit operates as specified in Article 9.6.2 through manual operation and that such Electric Generating Unit's reactive power production or absorption (measured in MVARs) are within the design capability of the Electric Generating Unit(s) and steady state stability limits. The Interconnection Customer shall restore the speed governors and voltage regulators to automatic operation as soon as possible. If the Large Generating Facility's speed governors and voltage regulators are improperly tuned or malfunctioning, the CAISO shall have the right to order the reduction in output or disconnection of the Large Generating Facility if the reliability of the CAISO Controlled Grid would be adversely affected. The Interconnection Customer shall not cause its Large Generating Facility to disconnect automatically or instantaneously from the CAISO Controlled Grid or trip any Electric Generating Unit comprising the Large Generating Facility for an under or over frequency condition unless the abnormal frequency condition persists for a time period beyond the limits set forth in ANSI/IEEE Standard C37.106, or such other standard as applied to other generators in the Balancing Authority Area on a comparable basis.

**9.6.3 Payment for Reactive Power.** CAISO is required to pay the Interconnection Customer for reactive power that Interconnection Customer provides or absorbs from an Electric Generating Unit when the CAISO requests the Interconnection Customer to operate its Electric Generating Unit outside the range specified in Article 9.6.1, provided that if the CAISO pays other generators for reactive power service within the specified range, it must also pay the Interconnection Customer. Payments shall be pursuant to Article 11.6 or such other agreement to which the CAISO and Interconnection Customer have otherwise agreed.

## **9.7 Outages and Interruptions.**

### **9.7.1 Outages.**

**9.7.1.1 Outage Authority and Coordination.** Each Party may in accordance with Good Utility Practice in coordination with the other Parties remove from service any of its respective Interconnection Facilities or Network Upgrades that may impact another Party's facilities as necessary to perform maintenance or testing or to install or replace equipment. Absent an Emergency Condition, the Party scheduling a removal of such facility(ies) from service will use Reasonable Efforts to schedule such removal on a date and time mutually acceptable to all Parties. In all circumstances any Party planning to remove such facility(ies) from service shall use Reasonable Efforts to minimize the effect on the other Parties of such removal.

**9.7.1.2 Outage Schedules.** The CAISO shall post scheduled outages of CAISO Controlled Grid facilities in accordance with the provisions of the CAISO Tariff. The Interconnection Customer shall submit its planned maintenance schedules



for the Large Generating Facility to the CAISO in accordance with the CAISO Tariff. The Interconnection Customer shall update its planned maintenance schedules in accordance with the CAISO Tariff. The CAISO may request the Interconnection Customer to reschedule its maintenance as necessary to maintain the reliability of the CAISO Controlled Grid in accordance with the CAISO Tariff. Such planned maintenance schedules and updates and changes to such schedules shall be provided by the Interconnection Customer to the Participating TO concurrently with their submittal to the CAISO. The CAISO shall compensate the Interconnection Customer for any additional direct costs that the Interconnection Customer incurs as a result of having to reschedule maintenance in accordance with the CAISO Tariff. The Interconnection Customer will not be eligible to receive compensation, if during the twelve (12) months prior to the date of the scheduled maintenance, the Interconnection Customer had modified its schedule of maintenance activities.

**9.7.1.3 Outage Restoration.** If an outage on a Party's Interconnection Facilities or Network Upgrades adversely affects another Party's operations or facilities, the Party that owns or controls the facility that is out of service shall use Reasonable Efforts to promptly restore such facility(ies) to a normal operating condition consistent with the nature of the outage. The Party that owns or controls the facility that is out of service shall provide the other Parties, to the extent such information is known, information on the nature of the Emergency Condition, if the outage is caused by an Emergency Condition, an estimated time of restoration, and any corrective actions required. Initial verbal notice shall be followed up as soon as practicable with written notice explaining the nature of the outage, if requested by a Party, which may be provided by e-mail or facsimile.

**9.7.2 Interruption of Service.** If required by Good Utility Practice to do so, the CAISO or the Participating TO may require the Interconnection Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect the CAISO's or the Participating TO's ability to perform such activities as are necessary to safely and reliably operate and maintain the Participating TO's electric system or the CAISO Controlled Grid. The following provisions shall apply to any interruption or reduction permitted under this Article 9.7.2:

**9.7.2.1** The interruption or reduction shall continue only for so long as reasonably necessary under Good Utility Practice;

**9.7.2.2** Any such interruption or reduction shall be made on an equitable, non-discriminatory basis with respect to all generating facilities directly connected to the CAISO Controlled Grid, subject to any conditions specified in this LGIA;

**9.7.2.3** When the interruption or reduction must be made under circumstances which do not allow for advance notice, the CAISO or Participating TO, as applicable, shall notify the Interconnection Customer by telephone as soon as practicable of the reasons for the curtailment, interruption, or reduction, and, if known, its expected duration. Telephone notification shall be followed by written notification, if requested by the Interconnection Customer, as soon as practicable;

**9.7.2.4** Except during the existence of an Emergency Condition, the CAISO or Participating TO shall notify the Interconnection Customer in advance regarding the timing of such interruption or reduction and further notify the Interconnection Customer of the expected duration. The CAISO or Participating TO shall coordinate with the Interconnection Customer using Good Utility Practice to schedule the interruption or reduction during periods of least impact to the Interconnection Customer, the CAISO, and the Participating TO;

9.7.2.5 The Parties shall cooperate and coordinate with each other to the extent necessary in order to restore the Large Generating Facility, Interconnection Facilities, the Participating TO's Transmission System, and the CAISO Controlled Grid to their normal operating state, consistent with system conditions and Good Utility Practice.

**9.7.3 Under-Frequency and Over Frequency Conditions.** The CAISO Controlled Grid is designed to automatically activate a load-shed program as required by Applicable Reliability Standards and the Applicable Reliability Council in the event of an under-frequency system disturbance. The Interconnection Customer shall implement under-frequency and over-frequency protection set points for the Large Generating Facility as required by Applicable Reliability Standards and the Applicable Reliability Council to ensure "ride through" capability. Large Generating Facility response to frequency deviations of pre-determined magnitudes, both under-frequency and over-frequency deviations, shall be studied and coordinated with the Participating TO and CAISO in accordance with Good Utility Practice. The term "ride through" as used herein shall mean the ability of a Generating Facility to stay connected to and synchronized with the CAISO Controlled Grid during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice.

**9.7.4 System Protection and Other Control Requirements.**

**9.7.4.1 System Protection Facilities.** The Interconnection Customer shall, at its expense, install, operate and maintain System Protection Facilities as a part of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. The Participating TO shall install at the Interconnection Customer's expense any System Protection Facilities that may be required on the Participating TO's Interconnection Facilities or the Participating TO's Transmission System as a result of the interconnection of the Large Generating Facility and the Interconnection Customer's Interconnection Facilities.

**9.7.4.2** The Participating TO's and Interconnection Customer's protection facilities shall be designed and coordinated with other systems in accordance with Applicable Reliability Standards, Applicable Reliability Council criteria, and Good Utility Practice.

**9.7.4.3** The Participating TO and Interconnection Customer shall each be responsible for protection of its facilities consistent with Good Utility Practice.

**9.7.4.4** The Participating TO's and Interconnection Customer's protective relay design shall incorporate the necessary test switches to perform the tests required in Article 6. The required test switches will be placed such that they allow operation of lockout relays while preventing breaker failure schemes from operating and causing unnecessary breaker operations and/or the tripping of the Interconnection Customer's Electric Generating Units.

**9.7.4.5** The Participating TO and Interconnection Customer will test, operate and maintain System Protection Facilities in accordance with Good Utility Practice and, if applicable, the requirements of the Participating TO's Interconnection Handbook.

**9.7.4.6** Prior to the in-service date, and again prior to the Commercial Operation Date, the Participating TO and Interconnection Customer or their agents shall perform a complete calibration test and functional trip test of the System Protection Facilities. At intervals suggested by Good Utility Practice, the standards and

procedures of the Participating TO, including, if applicable, the requirements of the Participating TO's Interconnection Handbook, and following any apparent malfunction of the System Protection Facilities, each Party shall perform both calibration and functional trip tests of its System Protection Facilities. These tests do not require the tripping of any in-service generation unit. These tests do, however, require that all protective relays and lockout contacts be activated.

**9.7.5 Requirements for Protection.** In compliance with Good Utility Practice and, if applicable, the requirements of the Participating TO's Interconnection Handbook, the Interconnection Customer shall provide, install, own, and maintain relays, circuit breakers and all other devices necessary to remove any fault contribution of the Large Generating Facility to any short circuit occurring on the Participating TO's Transmission System not otherwise isolated by the Participating TO's equipment, such that the removal of the fault contribution shall be coordinated with the protective requirements of the Participating TO's Transmission System. Such protective equipment shall include, without limitation, a disconnecting device with fault current-interrupting capability located between the Large Generating Facility and the Participating TO's Transmission System at a site selected upon mutual agreement (not to be unreasonably withheld, conditioned or delayed) of the Parties. The Interconnection Customer shall be responsible for protection of the Large Generating Facility and the Interconnection Customer's other equipment from such conditions as negative sequence currents, over- or under-frequency, sudden load rejection, over- or under-voltage, and generator loss-of-field. The Interconnection Customer shall be solely responsible to disconnect the Large Generating Facility and the Interconnection Customer's other equipment if conditions on the CAISO Controlled Grid could adversely affect the Large Generating Facility.

**9.7.6 Power Quality.** Neither the Participating TO's nor the Interconnection Customer's facilities shall cause excessive voltage flicker nor introduce excessive distortion to the sinusoidal voltage or current waves as defined by ANSI Standard C84.1-1989, in accordance with IEEE Standard 519, any applicable superseding electric industry standard, or any alternative Applicable Reliability Standard or Applicable Reliability Council standard. In the event of a conflict among ANSI Standard C84.1-1989, any applicable superseding electric industry standard, or any alternative Applicable Reliability Standard or Applicable Reliability Council standard, the alternative Applicable Reliability Standard or Applicable Reliability Council standard shall control.

**9.8 Switching and Tagging Rules.** Each Party shall provide the other Parties a copy of its switching and tagging rules that are applicable to the other Parties' activities. Such switching and tagging rules shall be developed on a non-discriminatory basis. The Parties shall comply with applicable switching and tagging rules, as amended from time to time, in obtaining clearances for work or for switching operations on equipment.

## **9.9 Use of Interconnection Facilities by Third Parties.**

**9.9.1 Purpose of Interconnection Facilities.** Except as may be required by Applicable Laws and Regulations, or as otherwise agreed to among the Parties, the Interconnection Facilities shall be constructed for the sole purpose of interconnecting the Large Generating Facility to the Participating TO's Transmission System and shall be used for no other purpose.

**9.9.2 Third Party Users.** If required by Applicable Laws and Regulations or if the Parties mutually agree, such agreement not to be unreasonably withheld, to allow one or more third parties to use the Participating TO's Interconnection Facilities, or any part thereof, the Interconnection Customer will be entitled to compensation for the capital expenses it incurred in connection with the Interconnection Facilities based upon the pro rata use of the Interconnection Facilities by the Participating TO, all third party users, and the

Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually-agreed upon methodology. In addition, cost responsibility for ongoing costs, including operation and maintenance costs associated with the Interconnection Facilities, will be allocated between the Interconnection Customer and any third party users based upon the pro rata use of the Interconnection Facilities by the Participating TO, all third party users, and the Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually agreed upon methodology. If the issue of such compensation or allocation cannot be resolved through such negotiations, it shall be submitted to FERC for resolution.

**9.10 Disturbance Analysis Data Exchange.** The Parties will cooperate with one another in the analysis of disturbances to either the Large Generating Facility or the CAISO Controlled Grid by gathering and providing access to any information relating to any disturbance, including information from oscillography, protective relay targets, breaker operations and sequence of events records, and any disturbance information required by Good Utility Practice.

## **ARTICLE 10. MAINTENANCE**

**10.1 Participating TO Obligations.** The Participating TO shall maintain the Participating TO's Transmission System and the Participating TO's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA.

**10.2 Interconnection Customer Obligations.** The Interconnection Customer shall maintain the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA.

**10.3 Coordination.** The Parties shall confer regularly to coordinate the planning, scheduling and performance of preventive and corrective maintenance on the Large Generating Facility and the Interconnection Facilities.

**10.4 Secondary Systems.** The Participating TO and Interconnection Customer shall cooperate with the other Parties in the inspection, maintenance, and testing of control or power circuits that operate below 600 volts, AC or DC, including, but not limited to, any hardware, control or protective devices, cables, conductors, electric raceways, secondary equipment panels, transducers, batteries, chargers, and voltage and current transformers that directly affect the operation of a Party's facilities and equipment which may reasonably be expected to impact the other Parties. Each Party shall provide advance notice to the other Parties before undertaking any work on such circuits, especially on electrical circuits involving circuit breaker trip and close contacts, current transformers, or potential transformers.

**10.5 Operating and Maintenance Expenses.** Subject to the provisions herein addressing the use of facilities by others, and except for operations and maintenance expenses associated with modifications made for providing interconnection or transmission service to a third party and such third party pays for such expenses, the Interconnection Customer shall be responsible for all reasonable expenses including overheads, associated with: (1) owning, operating, maintaining, repairing, and replacing the Interconnection Customer's Interconnection Facilities; and (2) operation, maintenance, repair and replacement of the Participating TO's Interconnection Facilities.

## **ARTICLE 11. PERFORMANCE OBLIGATION**

**11.1 Interconnection Customer's Interconnection Facilities.** The Interconnection Customer shall design, procure, construct, install, own and/or control the Interconnection Customer's Interconnection Facilities described in Appendix A at its sole expense.

**11.2 Participating TO's Interconnection Facilities.** The Participating TO shall design, procure, construct, install, own and/or control the Participating TO's Interconnection Facilities described in Appendix A at the sole expense of the Interconnection Customer. Unless the Participating TO elects to fund the capital for the Participating TO's Interconnection Facilities, they shall be solely funded by the Interconnection Customer.

**11.3 Network Upgrades and Distribution Upgrades.** The Participating TO shall design, procure, construct, install, and own the Network Upgrades and Distribution Upgrades described in Appendix A. The Interconnection Customer shall be responsible for all costs related to Distribution Upgrades. Unless the Participating TO elects to fund the capital for the Distribution Upgrades and Network Upgrades, they shall be funded by the Interconnection Customer in an amount determined pursuant to the methodology set forth in Section 13 of the LGIP. This specific amount is set forth in Appendix G to this LGIA.

**11.4 Transmission Credits.** No later than thirty (30) Calendar Days prior to the Commercial Operation Date, the Interconnection Customer may make a one-time election by written notice to the CAISO and the Participating TO to receive Firm Transmission Rights or Congestion Revenue Rights as defined in and as available under the CAISO Tariff at the time of the election in accordance with the CAISO Tariff, in lieu of a refund of the cost of Network Upgrades in accordance with Article 11.4.1.

**11.4.1 Repayment of Amounts Advanced for Network Upgrades.** Upon the Commercial Operation Date, the Interconnection Customer shall be entitled to a repayment, equal to the total amount paid to the Participating TO for the costs of Network Upgrades for which it is responsible, as set forth in Appendix G. Such amount shall include any tax gross-up or other tax-related payments associated with Network Upgrades not refunded to the Interconnection Customer pursuant to Article 5.17.8 or otherwise, and shall be paid to the Interconnection Customer by the Participating TO on a dollar-for-dollar basis either through (1) direct payments made on a levelized basis over the five-year period commencing on the Commercial Operation Date; or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years from the Commercial Operation Date. Notwithstanding the foregoing, if this LGIA terminates within five (5) years from the Commercial Operation Date, the Participating TO's obligation to pay refunds to the Interconnection Customer shall cease as of the date of termination. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment. Interest shall continue to accrue on the repayment obligation so long as this LGIA is in effect. The Interconnection Customer may assign such repayment rights to any person.

If the Large Generating Facility fails to achieve Commercial Operation, but it or another Generating Facility is later constructed and makes use of the Network Upgrades, the Participating TO shall at that time reimburse Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the Generating Facility, if different, is responsible for identifying and demonstrating to the Participating TO the appropriate entity to which reimbursement must be made in order to implement the intent of this reimbursement obligation.

**11.4.2 Special Provisions for Affected Systems.** The Interconnection Customer shall enter into an agreement with the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid, as applicable, in accordance with the LGIP. Such agreement shall specify the terms governing payments to be made by the Interconnection Customer to the owner of the Affected System and/or other affected

owners of portions of the CAISO Controlled Grid as well as the repayment by the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid. In no event shall the Participating TO be responsible for the repayment for any facilities that are not part of the Participating TO's Transmission System. In the event the Participating TO is a joint owner with an Affected System or with any other co-owner of a facility affected by the Large Generating Facility, the Participating TO's obligation to reimburse the Interconnection Customer for payments made to address the impacts of the Large Generating Facility on the system shall not exceed the proportionate amount of the cost of any upgrades attributable to the proportion of the jointly-owned facility owned by the Participating TO.

**11.4.3** Notwithstanding any other provision of this LGIA, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, Congestion Revenue Rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements, merchant transmission Congestion Revenue Rights in accordance with Section 36.11 of the CAISO Tariff, or transmission credits for transmission service that is not associated with the Large Generating Facility.

**11.5** **Provision of Interconnection Financial Security.** The Interconnection Customer is obligated to provide all necessary Interconnection Financial Security required under Section 9 of the LGIP in a manner acceptable under Section 9 of the LGIP. Failure to satisfy the LGIP's requirements for the provision of Interconnection Financial Security shall result in the Interconnection Request being deemed withdrawn and subject to LGIP Section 3.8.

**11.6** **Interconnection Customer Compensation.** If the CAISO requests or directs the Interconnection Customer to provide a service pursuant to Articles 9.6.3 (Payment for Reactive Power) or 13.5.1 of this LGIA, the CAISO shall compensate the Interconnection Customer in accordance with the CAISO Tariff.

**11.6.1** **Interconnection Customer Compensation for Actions During Emergency Condition.** The CAISO shall compensate the Interconnection Customer in accordance with the CAISO Tariff for its provision of real and reactive power and other Emergency Condition services that the Interconnection Customer provides to support the CAISO Controlled Grid during an Emergency Condition in accordance with Article 11.6.

## **ARTICLE 12. INVOICE**

**12.1** **General.** The Participating TO shall submit to the Interconnection Customer, on a monthly basis, invoices of amounts due pursuant to this LGIA for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party under this LGIA, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party. Notwithstanding the foregoing, any invoices between the CAISO and another Party shall be submitted and paid in accordance with the CAISO Tariff.

**12.2** **Final Invoice.** As soon as reasonably practicable, but within twelve months after completion of the construction of the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, the Participating TO shall provide an invoice of the final cost of the construction of the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, and shall set forth such costs in sufficient detail to enable the

Interconnection Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates. With respect to costs associated with the Participating TO's Interconnection Facilities and Distribution Upgrades, the Participating TO shall refund to the Interconnection Customer any amount by which the actual payment by the Interconnection Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice; or, in the event the actual costs of construction exceed the Interconnection Customer's actual payment for estimated costs, then the Interconnection Customer shall pay to the Participating TO any amount by which the actual costs of construction exceed the actual payment by the Interconnection Customer for estimated costs within thirty (30) Calendar Days of the issuance of such final construction invoice. With respect to costs associated with Network Upgrades, the Participating TO shall refund to the Interconnection Customer any amount by which the actual payment by the Interconnection Customer for estimated costs exceeds the actual costs of construction multiplied by the Interconnection Customer's percentage share of those costs, as set forth in Appendix G to this LGIA within thirty (30) Calendar Days of the issuance of such final construction invoice. In the event the actual costs of construction multiplied by the Interconnection Customer's percentage share of those costs exceed the Interconnection Customer's actual payment for estimated costs, then the Participating TO shall recover such difference through its transmission service rates.

**12.3 Payment.** Invoices shall be rendered to the Interconnection Customer at the address specified in Appendix F. The Interconnection Customer shall pay, or Participating TO shall refund, the amounts due within thirty (30) Calendar Days of the Interconnection Customer's receipt of the invoice. All payments shall be made in immediately available funds payable to the Interconnection Customer or Participating TO, or by wire transfer to a bank named and account designated by the invoicing Interconnection Customer or Participating TO. Payment of invoices by any Party will not constitute a waiver of any rights or claims any Party may have under this LGIA.

**12.4 Disputes.** In the event of a billing dispute between the Interconnection Customer and the Participating TO, the Participating TO and the CAISO shall continue to provide Interconnection Service under this LGIA as long as the Interconnection Customer: (i) continues to make all payments not in dispute; and (ii) pays to the Participating TO or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If the Interconnection Customer fails to meet these two requirements for continuation of service, then the Participating TO may provide notice to the Interconnection Customer of a Default pursuant to Article 17. Within thirty (30) Calendar Days after the resolution of the dispute, the Party that owes money to the other Party shall pay the amount due with interest calculated in accordance with the methodology set forth in FERC's Regulations at 18 C.F.R. § 35.19a(a)(2)(iii). Notwithstanding the foregoing, any billing dispute between the CAISO and another Party shall be resolved in accordance with the provisions of Article 27 of this LGIA.

## **ARTICLE 13. EMERGENCIES**

**13.1 [Reserved]**

**13.2 Obligations.** Each Party shall comply with the Emergency Condition procedures of the CAISO, NERC, the Applicable Reliability Council, Applicable Reliability Standards, Applicable Laws and Regulations, and any emergency procedures set forth in this LGIA.

**13.3 Notice.** The Participating TO or the CAISO shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that affects the Participating TO's Interconnection Facilities or Distribution System or the CAISO Controlled Grid, respectively, that may reasonably be expected to affect the Interconnection Customer's operation of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. The Interconnection Customer shall notify the Participating TO and the CAISO promptly when it

becomes aware of an Emergency Condition that affects the Large Generating Facility or the Interconnection Customer's Interconnection Facilities that may reasonably be expected to affect the CAISO Controlled Grid or the Participating TO's Interconnection Facilities. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of the Interconnection Customer's or Participating TO's facilities and operations, its anticipated duration and the corrective action taken and/or to be taken. The initial notice shall be followed as soon as practicable with written notice, if requested by a Party, which may be provided by electronic mail or facsimile, or in the case of the CAISO may be publicly posted on the CAISO's internet web site.

**13.4 Immediate Action.** Unless, in the Interconnection Customer's reasonable judgment, immediate action is required, the Interconnection Customer shall obtain the consent of the CAISO and the Participating TO, such consent to not be unreasonably withheld, prior to performing any manual switching operations at the Large Generating Facility or the Interconnection Customer's Interconnection Facilities in response to an Emergency Condition declared by the Participating TO or CAISO or in response to any other emergency condition.

### **13.5 CAISO and Participating TO Authority.**

**13.5.1 General.** The CAISO and Participating TO may take whatever actions or inactions, including issuance of dispatch instructions, with regard to the CAISO Controlled Grid or the Participating TO's Interconnection Facilities or Distribution System they deem necessary during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the CAISO Controlled Grid or the Participating TO's Interconnection Facilities or Distribution System, and (iii) limit or prevent damage, and (iv) expedite restoration of service.

The Participating TO and the CAISO shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. The Participating TO or the CAISO may, on the basis of technical considerations, require the Large Generating Facility to mitigate an Emergency Condition by taking actions necessary and limited in scope to remedy the Emergency Condition, including, but not limited to, directing the Interconnection Customer to shut-down, start-up, increase or decrease the real or reactive power output of the Large Generating Facility; implementing a reduction or disconnection pursuant to Article 13.5.2; directing the Interconnection Customer to assist with black start (if available) or restoration efforts; or altering the outage schedules of the Large Generating Facility and the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall comply with all of the CAISO's and Participating TO's operating instructions concerning Large Generating Facility real power and reactive power output within the manufacturer's design limitations of the Large Generating Facility's equipment that is in service and physically available for operation at the time, in compliance with Applicable Laws and Regulations.

**13.5.2 Reduction and Disconnection.** The Participating TO or the CAISO may reduce Interconnection Service or disconnect the Large Generating Facility or the Interconnection Customer's Interconnection Facilities when such reduction or disconnection is necessary under Good Utility Practice due to Emergency Conditions. These rights are separate and distinct from any right of curtailment of the CAISO pursuant to the CAISO Tariff. When the CAISO or Participating TO can schedule the reduction or disconnection in advance, the CAISO or Participating TO shall notify the Interconnection Customer of the reasons, timing and expected duration of the reduction or disconnection. The CAISO or Participating TO shall coordinate with the Interconnection Customer using Good Utility Practice to schedule the reduction or disconnection during periods of least impact to the Interconnection Customer and the CAISO and Participating TO. Any reduction or disconnection shall continue only for so



long as reasonably necessary under Good Utility Practice. The Parties shall cooperate with each other to restore the Large Generating Facility, the Interconnection Facilities, and the CAISO Controlled Grid to their normal operating state as soon as practicable consistent with Good Utility Practice.

**13.6 Interconnection Customer Authority.** Consistent with Good Utility Practice, this LGIA, and the CAISO Tariff, the Interconnection Customer may take actions or inactions with regard to the Large Generating Facility or the Interconnection Customer's Interconnection Facilities during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service. Interconnection Customer shall use Reasonable Efforts to minimize the effect of such actions or inactions on the CAISO Controlled Grid and the Participating TO's Interconnection Facilities. The CAISO and Participating TO shall use Reasonable Efforts to assist Interconnection Customer in such actions.

**13.7 Limited Liability.** Except as otherwise provided in Article 11.6.1 of this LGIA, no Party shall be liable to any other Party for any action it takes in responding to an Emergency Condition so long as such action is made in good faith and is consistent with Good Utility Practice.

#### **ARTICLE 14. REGULATORY REQUIREMENTS AND GOVERNING LAW**

**14.1 Regulatory Requirements.** Each Party's obligations under this LGIA shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the applying Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek and use its Reasonable Efforts to obtain such other approvals. Nothing in this LGIA shall require the Interconnection Customer to take any action that could result in its inability to obtain, or its loss of, status or exemption under the Federal Power Act or the Public Utility Holding Company Act of 1935, as amended, or the Public Utility Regulatory Policies Act of 1978, or the Energy Policy Act of 2005.

#### **14.2 Governing Law.**

**14.2.1** The validity, interpretation and performance of this LGIA and each of its provisions shall be governed by the laws of the state where the Point of Interconnection is located, without regard to its conflicts of law principles.

**14.2.2** This LGIA is subject to all Applicable Laws and Regulations.

**14.2.3** Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, rules, or regulations of a Governmental Authority.

#### **ARTICLE 15. NOTICES**

**15.1 General.** Unless otherwise provided in this LGIA, any notice, demand or request required or permitted to be given by a Party to another and any instrument required or permitted to be tendered or delivered by a Party in writing to another shall be effective when delivered and may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered mail, addressed to the Party, or personally delivered to the Party, at the address set out in Appendix F, Addresses for Delivery of Notices and Billings.

A Party must update the information in Appendix F as information changes. A Party may change the notice information in this LGIA by giving five (5) Business Days written notice prior to the effective date of the change. Such changes shall not constitute an amendment to this LGIA.

**15.2 Billings and Payments.** Billings and payments shall be sent to the addresses set out in Appendix F.

**15.3 Alternative Forms of Notice.** Any notice or request required or permitted to be given by a Party to another and not required by this LGIA to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out in Appendix F.

**15.4 Operations and Maintenance Notice.** Each Party shall notify the other Parties in writing of the identity of the person(s) that it designates as the point(s) of contact with respect to the implementation of Articles 9 and 10.

## **ARTICLE 16. FORCE MAJEURE**

### **16.1 Force Majeure.**

**16.1.1** Economic hardship is not considered a Force Majeure event.

**16.1.2** No Party shall be considered to be in Default with respect to any obligation hereunder, (including obligations under Article 4), other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other Party in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this Article shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall exercise due diligence to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

## **ARTICLE 17. DEFAULT**

### **17.1 Default.**

**17.1.1 General.** No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this LGIA or the result of an act or omission of the other Party. Upon a Breach, the affected non-Breaching Party(ies) shall give written notice of such Breach to the Breaching Party. Except as provided in Article 17.1.2, the Breaching Party shall have thirty (30) Calendar Days from receipt of the Default notice within which to cure such Breach; provided however, if such Breach is not capable of cure within thirty (30) Calendar Days, the Breaching Party shall commence such cure within thirty (30) Calendar Days after notice and continuously and diligently complete such cure within ninety (90) Calendar Days from receipt of the Default notice; and, if cured within such time, the Breach specified in such notice shall cease to exist.

**17.1.2 Right to Terminate.** If a Breach is not cured as provided in this Article, or if a Breach is not capable of being cured within the period provided for herein, the affected non-Breaching Party(ies) shall have the right to declare a Default and terminate this LGIA by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not such Party(ies) terminates this LGIA, to recover from the Breaching Party all amounts due hereunder, plus all other damages and remedies to

which it is entitled at law or in equity. The provisions of this Article will survive termination of this LGIA.

## **ARTICLE 18. INDEMNITY, CONSEQUENTIAL DAMAGES AND INSURANCE**

**18.1 Indemnity.** Each Party shall at all times indemnify, defend, and hold the other Parties harmless from, any and all Losses arising out of or resulting from another Party's action or inactions of its obligations under this LGIA on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the Indemnified Party.

**18.1.1 Indemnified Party.** If an Indemnified Party is entitled to indemnification under this Article 18 as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 18.1, to assume the defense of such claim, such Indemnified Party may at the expense of the Indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

**18.1.2 Indemnifying Party.** If an Indemnifying Party is obligated to indemnify and hold any Indemnified Party harmless under this Article 18, the amount owing to the Indemnified Party shall be the amount of such Indemnified Party's actual Loss, net of any insurance or other recovery.

**18.1.3 Indemnity Procedures.** Promptly after receipt by an Indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 18.1 may apply, the Indemnified Party shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Party. If the defendants in any such action include one or more Indemnified Parties and the Indemnifying Party and if the Indemnified Party reasonably concludes that there may be legal defenses available to it and/or other Indemnified Parties which are different from or additional to those available to the Indemnifying Party, the Indemnified Party shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Party or Indemnified Parties having such differing or additional legal defenses.

The Indemnified Party shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Party and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Party, or there exists a conflict or adversity of interest between the Indemnified Party and the Indemnifying Party, in such event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Party, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Party, which shall not be unreasonably withheld, conditioned or delayed.

**18.2 Consequential Damages.** Other than the liquidated damages heretofore described in Article 5.3, in no event shall any Party be liable under any provision of this LGIA for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive

damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to another Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

**18.3 Insurance.** Each Party shall, at its own expense, maintain in force throughout the period of this LGIA, and until released by the other Parties, the following minimum insurance coverages, with insurers rated no less than A- (with a minimum size rating of VII) by Bests' Insurance Guide and Key Ratings and authorized to do business in the state where the Point of Interconnection is located, except in the case of the CAISO, the State of California:

**18.3.1** Employer's Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located, except in the case of the CAISO, the State of California.

**18.3.2** Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate combined single limit for personal injury, bodily injury, including death and property damage.

**18.3.3** Business Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage.

**18.3.4** Excess Public Liability Insurance over and above the Employer's Liability Commercial General Liability and Business Automobile Liability Insurance coverage, with a minimum combined single limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.

**18.3.5** The Commercial General Liability Insurance, Business Automobile Insurance and Excess Public Liability Insurance policies shall name the other Parties, their parents, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this LGIA against the Other Party Group and provide thirty (30) Calendar Days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition.

**18.3.6** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Public Liability Insurance policies shall contain provisions that specify that the policies are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Party shall be responsible for its respective deductibles or retentions.

**18.3.7** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Public Liability Insurance policies, if written on a Claims First Made Basis,

shall be maintained in full force and effect for two (2) years after termination of this LGIA, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed by the Parties.

- 18.3.8** The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this LGIA.
- 18.3.9** Within ten (10) Calendar Days following execution of this LGIA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) Calendar Days thereafter, each Party shall provide certification of all insurance required in this LGIA, executed by each insurer or by an authorized representative of each insurer.
- 18.3.10** Notwithstanding the foregoing, each Party may self-insure to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program; provided that, such Party's senior unsecured debt or issuer rating is BBB-, or better, as rated by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior unsecured debt rating and issuer rating are both unrated by Standard & Poor's or are both rated at less than BBB- by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9. In the event that a Party is permitted to self-insure pursuant to this Article 18.3.10, it shall notify the other Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.
- 18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this LGIA.

## **ARTICLE 19. ASSIGNMENT**

- 19.1** **Assignment.** This LGIA may be assigned by a Party only with the written consent of the other Parties; provided that a Party may assign this LGIA without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this LGIA; and provided further that the Interconnection Customer shall have the right to assign this LGIA, without the consent of the CAISO or Participating TO, for collateral security purposes to aid in providing financing for the Large Generating Facility, provided that the Interconnection Customer will promptly notify the CAISO and Participating TO of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the CAISO and Participating TO of the date and particulars of any such exercise of assignment right(s), including providing the CAISO and Participating TO with proof that it meets the requirements of Articles 11.5 and 18.3. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this LGIA shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## **ARTICLE 20. SEVERABILITY**

**20.1 Severability.** If any provision in this LGIA is finally determined to be invalid, void or unenforceable by any court or other Governmental Authority having jurisdiction, such determination shall not invalidate, void or make unenforceable any other provision, agreement or covenant of this LGIA; provided that if the Interconnection Customer (or any third party, but only if such third party is not acting at the direction of the Participating TO or CAISO) seeks and obtains such a final determination with respect to any provision of the Alternate Option (Article 5.1.2), or the Negotiated Option (Article 5.1.4), then none of the provisions of Article 5.1.2 or 5.1.4 shall thereafter have any force or effect and the Parties' rights and obligations shall be governed solely by the Standard Option (Article 5.1.1).

## **ARTICLE 21. COMPARABILITY**

**21.1 Comparability.** The Parties will comply with all applicable comparability and code of conduct laws, rules and regulations, as amended from time to time.

## **ARTICLE 22. CONFIDENTIALITY**

**22.1 Confidentiality.** Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by any of the Parties to the other Parties prior to the execution of this LGIA.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Parties receiving the information that the information is confidential.

If requested by any Party, the other Parties shall provide in writing, the basis for asserting that the information referred to in this Article 22 warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

**22.1.1 Term.** During the term of this LGIA, and for a period of three (3) years after the expiration or termination of this LGIA, except as otherwise provided in this Article 22, each Party shall hold in confidence and shall not disclose to any person Confidential Information.

**22.1.2 Scope.** Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of this LGIA; or (6) is required, in accordance with Article 22.1.7 of this LGIA, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this LGIA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

**22.1.3 Release of Confidential Information.** No Party shall release or disclose Confidential Information to any other person, except to its employees, consultants, Affiliates (limited by the Standards of Conduct requirements set forth in Part 358 of FERC's Regulations, 18 C.F.R. 358), subcontractors, or to parties who may be or considering providing financing to or equity participation with the Interconnection Customer, or to potential purchasers or assignees of the Interconnection Customer, on a need-to-know basis in connection with this LGIA, unless such person has first been advised of the confidentiality provisions of this Article 22 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 22.

**22.1.4 Rights.** Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Parties. The disclosure by each Party to the other Parties of Confidential Information shall not be deemed a waiver by a Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

**22.1.5 No Warranties.** The mere fact that a Party has provided Confidential Information does not constitute a warranty or representation as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to the other Parties nor to enter into any further agreements or proceed with any other relationship or joint venture.

**22.1.6 Standard of Care.** Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under this LGIA or its regulatory requirements.

**22.1.7 Order of Disclosure.** If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Parties with prompt notice of such request(s) or requirement(s) so that the other Parties may seek an appropriate protective order or waive compliance with the terms of this LGIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

**22.1.8 Termination of Agreement.** Upon termination of this LGIA for any reason, each Party shall, within ten (10) Calendar Days of receipt of a written request from another Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the other Party) or return to the other Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the other Party.

**22.1.9 Remedies.** The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this Article 22. Each Party accordingly agrees that the other Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Article 22, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 22, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained

herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 22.

**22.1.10 Disclosure to FERC, its Staff, or a State.** Notwithstanding anything in this Article 22 to the contrary, and pursuant to 18 C.F.R. section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this LGIA, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. section 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this LGIA prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other Parties to the LGIA when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

**22.1.11** Subject to the exception in Article 22.1.10, Confidential Information shall not be disclosed by the other Parties to any person not employed or retained by the other Parties, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Parties, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this LGIA or as a transmission service provider or a Balancing Authority including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. The Party asserting confidentiality shall notify the other Parties in writing of the information it claims is confidential. Prior to any disclosures of another Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

## **ARTICLE 23. ENVIRONMENTAL RELEASES**

**23.1** Each Party shall notify the other Parties, first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Large Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Parties. The notifying Party shall: (i) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than twenty-four hours after such Party becomes aware of the occurrence; and (ii) promptly furnish to the other Parties copies of any publicly available reports filed with any Governmental Authorities addressing such events.

## **ARTICLE 24. INFORMATION REQUIREMENTS**



**24.1 Information Acquisition.** The Participating TO and the Interconnection Customer shall submit specific information regarding the electrical characteristics of their respective facilities to each other as described below and in accordance with Applicable Reliability Standards.

**24.2 Information Submission by Participating TO.** The initial information submission by the Participating TO shall occur no later than one hundred eighty (180) Calendar Days prior to Trial Operation and shall include the Participating TO's Transmission System information necessary to allow the Interconnection Customer to select equipment and meet any system protection and stability requirements, unless otherwise agreed to by the Participating TO and the Interconnection Customer. On a monthly basis the Participating TO shall provide the Interconnection Customer and the CAISO a status report on the construction and installation of the Participating TO's Interconnection Facilities and Network Upgrades, including, but not limited to, the following information: (1) progress to date; (2) a description of the activities since the last report; (3) a description of the action items for the next period; and (4) the delivery status of equipment ordered.

**24.3 Updated Information Submission by Interconnection Customer.** The updated information submission by the Interconnection Customer, including manufacturer information, shall occur no later than one hundred eighty (180) Calendar Days prior to the Trial Operation. The Interconnection Customer shall submit a completed copy of the Electric Generating Unit data requirements contained in Appendix 1 to the LGIP. It shall also include any additional information provided to the Participating TO and the CAISO for the Interconnection Studies. Information in this submission shall be the most current Electric Generating Unit design or expected performance data. Information submitted for stability models shall be compatible with the Participating TO and CAISO standard models. If there is no compatible model, the Interconnection Customer will work with a consultant mutually agreed to by the Parties to develop and supply a standard model and associated information.

If the Interconnection Customer's data is materially different from what was originally provided to the Participating TO and the CAISO for the Interconnection Studies, then the Participating TO and the CAISO will conduct appropriate studies pursuant to the LGIP to determine the impact on the Participating TO's Transmission System and affected portions of the CAISO Controlled Grid based on the actual data submitted pursuant to this Article 24.3. The Interconnection Customer shall not begin Trial Operation until such studies are completed and all other requirements of this LGIA are satisfied.

**24.4 Information Supplementation.** Prior to the Trial Operation date, the Parties shall supplement their information submissions described above in this Article 24 with any and all "as-built" Electric Generating Unit information or "as-tested" performance information that differs from the initial submissions or, alternatively, written confirmation that no such differences exist. The Interconnection Customer shall conduct tests on the Electric Generating Unit as required by Good Utility Practice such as an open circuit "step voltage" test on the Electric Generating Unit to verify proper operation of the Electric Generating Unit's automatic voltage regulator.

Unless otherwise agreed, the test conditions shall include: (1) Electric Generating Unit at synchronous speed; (2) automatic voltage regulator on and in voltage control mode; and (3) a five percent (5 percent) change in Electric Generating Unit terminal voltage initiated by a change in the voltage regulators reference voltage. The Interconnection Customer shall provide validated test recordings showing the responses of Electric Generating Unit terminal and field voltages. In the event that direct recordings of these voltages is impractical, recordings of other voltages or currents that mirror the response of the Electric Generating Unit's terminal or field voltage are acceptable if information necessary to translate these alternate quantities to actual Electric Generating Unit terminal or field voltages is provided. Electric Generating Unit testing shall be conducted and results provided to the Participating TO and the CAISO for each individual Electric Generating Unit in a station.

Subsequent to the Commercial Operation Date, the Interconnection Customer shall provide the Participating TO and the CAISO any information changes due to equipment replacement, repair, or adjustment. The Participating TO shall provide the Interconnection Customer any information changes due to equipment replacement, repair or adjustment in the directly connected substation or any adjacent Participating TO-owned substation that may affect the Interconnection Customer's Interconnection Facilities equipment ratings, protection or operating requirements. The Parties shall provide such information pursuant to Article 5.19.

## **ARTICLE 25. INFORMATION ACCESS AND AUDIT RIGHTS**

**25.1 Information Access.** Each Party (the "disclosing Party") shall make available to the other Party information that is in the possession of the disclosing Party and is necessary in order for the other Party to: (i) verify the costs incurred by the disclosing Party for which the other Party is responsible under this LGIA; and (ii) carry out its obligations and responsibilities under this LGIA. The Parties shall not use such information for purposes other than those set forth in this Article 25.1 and to enforce their rights under this LGIA. Nothing in this Article 25 shall obligate the CAISO to make available to a Party any third party information in its possession or control if making such third party information available would violate a CAISO Tariff restriction on the use or disclosure of such third party information.

**25.2 Reporting of Non-Force Majeure Events.** Each Party (the "notifying Party") shall notify the other Parties when the notifying Party becomes aware of its inability to comply with the provisions of this LGIA for a reason other than a Force Majeure event. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this Article shall not entitle the Party receiving such notification to allege a cause for anticipatory breach of this LGIA.

**25.3 Audit Rights.** Subject to the requirements of confidentiality under Article 22 of this LGIA, the Parties' audit rights shall include audits of a Party's costs pertaining to such Party's performance or satisfaction of obligations owed to the other Party under this LGIA, calculation of invoiced amounts, the CAISO's efforts to allocate responsibility for the provision of reactive support to the CAISO Controlled Grid, the CAISO's efforts to allocate responsibility for interruption or reduction of generation on the CAISO Controlled Grid, and each such Party's actions in an Emergency Condition.

**25.3.1** The Interconnection Customer and the Participating TO shall each have the right, during normal business hours, and upon prior reasonable notice to the other Party, to audit at its own expense the other Party's accounts and records pertaining to either such Party's performance or either such Party's satisfaction of obligations owed to the other Party under this LGIA. Subject to Article 25.3.2, any audit authorized by this Article shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to each such Party's performance and satisfaction of obligations under this LGIA. Each such Party shall keep such accounts and records for a period equivalent to the audit rights periods described in Article 25.4.

**25.3.2** Notwithstanding anything to the contrary in Article 25.3, each Party's rights to audit the CAISO's accounts and records shall be as set forth in Section 22.1 of the CAISO Tariff.

**25.4 Audit Rights Periods.**

**25.4.1 Audit Rights Period for Construction-Related Accounts and Records.** Accounts and records related to the design, engineering, procurement, and construction of Participating

TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades constructed by the Participating TO shall be subject to audit for a period of twenty-four months following the Participating TO's issuance of a final invoice in accordance with Article 12.2. Accounts and records related to the design, engineering, procurement, and construction of Participating TO's Interconnection Facilities and/or Stand Alone Network Upgrades constructed by the Interconnection Customer shall be subject to audit and verification by the Participating TO and the CAISO for a period of twenty-four months following the Interconnection Customer's issuance of a final invoice in accordance with Article 5.2(8).

**25.4.2 Audit Rights Period for All Other Accounts and Records.** Accounts and records related to a Party's performance or satisfaction of all obligations under this LGIA other than those described in Article 25.4.1 shall be subject to audit as follows: (i) for an audit relating to cost obligations, the applicable audit rights period shall be twenty-four months after the auditing Party's receipt of an invoice giving rise to such cost obligations; and (ii) for an audit relating to all other obligations, the applicable audit rights period shall be twenty-four months after the event for which the audit is sought; provided that each Party's rights to audit the CAISO's accounts and records shall be as set forth in Section 22.1 of the CAISO Tariff.

**25.5 Audit Results.** If an audit by the Interconnection Customer or the Participating TO determines that an overpayment or an underpayment has occurred with respect to the other Party, a notice of such overpayment or underpayment shall be given to the other Party together with those records from the audit which supports such determination. The Party that is owed payment shall render an invoice to the other Party and such invoice shall be paid pursuant to Article 12 hereof.

**25.5.1** Notwithstanding anything to the contrary in Article 25.5, the Interconnection Customer's and Participating TO's rights to audit the CAISO's accounts and records shall be as set forth in Section 22.1 of the CAISO Tariff, and the CAISO's process for remedying an overpayment or underpayment shall be as set forth in the CAISO Tariff.

## **ARTICLE 26. SUBCONTRACTORS**

**26.1 General.** Nothing in this LGIA shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this LGIA; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this LGIA in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

**26.2 Responsibility of Principal.** The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this LGIA. The hiring Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the CAISO or Participating TO be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under Article 5 of this LGIA. Any applicable obligation imposed by this LGIA upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

**26.3 No Limitation by Insurance.** The obligations under this Article 26 will not be limited in any way by any limitation of subcontractor's insurance.

## **ARTICLE 27. DISPUTES**

All disputes arising out of or in connection with this LGIA whereby relief is sought by or from the CAISO shall be settled in accordance with the provisions of Article 13 of the CAISO Tariff, except that references

to the CAISO Tariff in such Article 13 of the CAISO Tariff shall be read as references to this LGIA. Disputes arising out of or in connection with this LGIA not subject to provisions of Article 13 of the CAISO Tariff shall be resolved as follows:

**27.1 Submission.** In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with this LGIA or its performance, such Party (the “disputing Party”) shall provide the other Party with written notice of the dispute or claim (“Notice of Dispute”). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party’s receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this LGIA.

**27.2 External Arbitration Procedures.** Any arbitration initiated under this LGIA shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) Calendar Days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association (“Arbitration Rules”) and any applicable FERC regulations; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Article 27, the terms of this Article 27 shall prevail.

**27.3 Arbitration Decisions.** Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of this LGIA and shall have no power to modify or change any provision of this Agreement in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator(s) must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

**27.4 Costs.** Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

## **ARTICLE 28. REPRESENTATIONS, WARRANTIES AND COVENANTS**

**28.1 General.** Each Party makes the following representations, warranties and covenants:

**28.1.1 Good Standing.** Such Party is duly organized, validly existing and in good standing under the laws of the state in which it is organized, formed, or incorporated, as applicable; that it is qualified to do business in the state or states in which the Large Generating Facility, Interconnection Facilities and Network Upgrades owned by such

Party, as applicable, are located; and that it has the corporate power and authority to own its properties, to carry on its business as now being conducted and to enter into this LGIA and carry out the transactions contemplated hereby and perform and carry out all covenants and obligations on its part to be performed under and pursuant to this LGIA.

**28.1.2 Authority.** Such Party has the right, power and authority to enter into this LGIA, to become a Party hereto and to perform its obligations hereunder. This LGIA is a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).

**28.1.3 No Conflict.** The execution, delivery and performance of this LGIA does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Party, or any judgment, license, permit, order, material agreement or instrument applicable to or binding upon such Party or any of its assets.

**28.1.4 Consent and Approval.** Such Party has sought or obtained, or, in accordance with this LGIA will seek or obtain, each consent, approval, authorization, order, or acceptance by any Governmental Authority in connection with the execution, delivery and performance of this LGIA, and it will provide to any Governmental Authority notice of any actions under this LGIA that are required by Applicable Laws and Regulations.

## **ARTICLE 29. [RESERVED]**

## **ARTICLE 30. MISCELLANEOUS**

**30.1 Binding Effect.** This LGIA and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.

**30.2 Conflicts.** In the event of a conflict between the body of this LGIA and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this LGIA shall prevail and be deemed the final intent of the Parties.

**30.3 Rules of Interpretation.** This LGIA, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this LGIA, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this LGIA), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any Applicable Laws and Regulations means such Applicable Laws and Regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article of this LGIA or such Appendix to this LGIA, or such Section to the LGIP or such Appendix to the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this LGIA as a whole and not to any particular Article or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality

of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".

**30.4 Entire Agreement.** This LGIA, including all Appendices and Schedules attached hereto, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between or among the Parties with respect to the subject matter of this LGIA. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this LGIA.

**30.5 No Third Party Beneficiaries.** This LGIA is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.

**30.6 Waiver.** The failure of a Party to this LGIA to insist, on any occasion, upon strict performance of any provision of this LGIA will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this LGIA shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this LGIA. Termination or Default of this LGIA for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO. Any waiver of this LGIA shall, if requested, be provided in writing.

**30.7 Headings.** The descriptive headings of the various Articles of this LGIA have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this LGIA.

**30.8 Multiple Counterparts.** This LGIA may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

**30.9 Amendment.** The Parties may by mutual agreement amend this LGIA by a written instrument duly executed by all of the Parties. Such amendment shall become effective and a part of this LGIA upon satisfaction of all Applicable Laws and Regulations.

**30.10 Modification by the Parties.** The Parties may by mutual agreement amend the Appendices to this LGIA by a written instrument duly executed by all of the Parties. Such amendment shall become effective and a part of this LGIA upon satisfaction of all Applicable Laws and Regulations.

**30.11 Reservation of Rights.** The CAISO and Participating TO shall each have the right to make a unilateral filing with FERC to modify this LGIA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles and Appendices of this LGIA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these Articles and Appendices:

Recitals, 1, 2.1, 2.2, 2.3, 2.4, 2.6, 3.1, 3.3, 4.1, 4.2, 4.3, 4.4, 5 preamble, 5.4, 5.7, 5.8, 5.9, 5.12, 5.13, 5.18, 5.19.1, 7.1, 7.2, 8, 9.1, 9.2, 9.3, 9.5, 9.6, 9.7, 9.8, 9.10, 10.3, 11.4, 12.1, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24.3, 24.4, 25.1, 25.2, 25.3 (excluding subparts), 25.4.2, 26, 28, 29, 30, Appendix D, Appendix F, Appendix G, and any other Article not reserved exclusively to the Participating TO or the CAISO below.

The Participating TO shall have the exclusive right to make a unilateral filing with FERC to modify this LGIA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles and Appendices of this LGIA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these Articles and Appendices:

2.5, 5.1, 5.2, 5.3, 5.5, 5.6, 5.10, 5.11, 5.14, 5.15, 5.16, 5.17, 5.19 (excluding 5.19.1), 6, 7.3, 9.4, 9.9, 10.1, 10.2, 10.4, 10.5, 11.1, 11.2, 11.3, 11.5, 12.2, 12.3, 12.4, 24.1, 24.2, 25.3.1, 25.4.1, 25.5 (excluding 25.5.1), 27 (excluding preamble), Appendix A, Appendix B, Appendix C, and Appendix E.

The CAISO shall have the exclusive right to make a unilateral filing with FERC to modify this LGIA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles of this LGIA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these Articles:

3.2, 4.5, 11.6, 25.3.2, 25.5.1, and 27 preamble.

The Interconnection Customer, the CAISO, and the Participating TO shall have the right to make a unilateral filing with FERC to modify this LGIA pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this LGIA shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

**30.12 No Partnership.** This LGIA shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership among the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.

**30.13 Joint and Several Obligations.** Except as otherwise provided in this LGIA, the obligations of the CAISO, the Participating TO, and the Interconnection Customer are several, and are neither joint nor joint and several.

**IN WITNESS WHEREOF,** the Parties have executed this LGIA in multiple originals, each of which shall constitute and be an original effective agreement among the Parties.

**[Insert name of Interconnection Customer]**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[Insert name of Participating TO]**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**California Independent System Operator Corporation**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



**Appendices to LGIA**

Appendix A Interconnection Facilities, Network Upgrades and Distribution Upgrades

Appendix B Milestones

Appendix C Interconnection Details

Appendix D Security Arrangements Details

Appendix E Commercial Operation Date

Appendix F Addresses for Delivery of Notices and Billings

Appendix G Interconnection Customer's Proportional Share of Costs of Network Upgrades for  
Applicable Project Group

Appendix H Interconnection Requirements for a Wind Generating Plant

**Appendix A**  
**To LGIA**

**Interconnection Facilities, Network Upgrades and Distribution Upgrades**

**1. Interconnection Facilities:**

**(a) [insert Interconnection Customer's Interconnection Facilities]:**

**(b) [insert Participating TO's Interconnection Facilities]:**

**2. Network Upgrades:**

**(a) [insert Stand Alone Network Upgrades]:**

**(b) [insert Other Network Upgrades]:**

**(i) [insert Participating TO's Reliability Network Upgrades]**

**(ii) [insert Participating TO's Delivery Network Upgrades]**

**3. Distribution Upgrades:**

**Appendix B**  
**To LGIA**

**Milestones**

**Appendix C**  
**To LGIA**

**Interconnection Details**

**Appendix D**  
**To LGIA**

**Security Arrangements Details**

Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, all Participating TOs, market participants, and Interconnection Customers interconnected to the CAISO Controlled Grid to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

The Interconnection Customer shall meet the requirements for security implemented pursuant to the CAISO Tariff, including the CAISO's standards for information security posted on the CAISO's internet web site at the following internet address: <http://www.caiso.com/pubinfo/info-security/index.html>.

**Appendix E**  
**To LGIA**

**Commercial Operation Date**

[This Appendix E sets forth a form of letter to be provided by the Interconnection Customer to the CAISO and Participating TO to provide formal notice of the Commercial Operation of an Electric Generating Unit.]

**[Date]**

**[CAISO Address]**

**[Participating TO Address]**

Re: \_\_\_\_\_ Electric Generating Unit

Dear \_\_\_\_\_:

On **[Date]** **[Interconnection Customer]** has completed Trial Operation of Unit No. \_\_\_\_\_. This letter confirms that **[Interconnection Customer]** commenced Commercial Operation of Unit No. \_\_\_\_\_ at the **Electric Generating Unit**, effective as of **[Date plus one day]** and that **[Interconnection Customer]** provided the CAISO's operations personnel advance notice of its intended Commercial Operation Date no less than five Business Days prior to that date.

Thank you.

**[Signature]**

**[Interconnection Customer Representative]**

**Appendix F**  
**To LGIA**

**Addresses for Delivery of Notices and Billings**

**Notices:**

Participating TO:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

CAISO:

[To be supplied.]

**Billings and Payments:**

Participating TO:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

CAISO:

[To be supplied.]

**Alternative Forms of Delivery of Notices (telephone, facsimile or e-mail):**

Participating TO:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

CAISO:

[To be supplied.]



**Appendix G**  
**To LGIA**

**Interconnection Customer's Proportional Share of Costs of Network Upgrades for Applicable Project Group**

**Appendix H**  
**To LGIA**

**INTERCONNECTION REQUIREMENTS FOR A WIND GENERATING PLANT**

Appendix H sets forth requirements and provisions specific to a wind generating plant. All other requirements of this LGIA continue to apply to wind generating plant interconnections.

**A. Technical Standards Applicable to a Wind Generating Plant**

**i. Low Voltage Ride-Through (LVRT) Capability**

A wind generating plant shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below.

All wind generating plants subject to FERC Order No. 661 must meet the following requirements:

1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 – 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the Participating TO. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the CAISO Controlled Grid. A wind generating plant shall remain interconnected during such a fault on the CAISO Controlled Grid for a voltage level as low as zero volts, as measured at the high voltage side of the wind GSU.
2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.
3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAR Compensator) within the wind generating plant or by a combination of generator performance and additional equipment.
5. Existing individual generator units that are, or have been, interconnected to the CAISO Controlled Grid at the same location at the effective date of the Appendix H LVRT Standard are exempt from meeting the Appendix H LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Appendix H LVRT Standard.

**ii. Power Factor Design Criteria (Reactive Power)**

A wind generating plant shall operate within a power factor within the range of 0.95 leading to 0.95 lagging, measured at the Point of Interconnection as defined in this LGIA in order to maintain a specified voltage schedule, if the Phase II Interconnection Study shows that such a requirement is necessary to ensure safety or reliability. The power factor range standard can be met by using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two, if agreed to by the Participating TO and CAISO. The Interconnection Customer shall not disable power

factor equipment while the wind plant is in operation. Wind plants shall also be able to provide sufficient dynamic voltage support in lieu of the power system stabilizer and automatic voltage regulation at the generator excitation system if the Phase II Interconnection Study shows this to be required for system safety or reliability.

**iii. Supervisory Control and Data Acquisition (SCADA) Capability**

The wind plant shall provide SCADA capability to transmit data and receive instructions from the Participating TO and CAISO to protect system reliability. The Participating TO and CAISO and the wind plant Interconnection Customer shall determine what SCADA information is essential for the proposed wind plant, taking into account the size of the plant and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

\* \* \*

**Attachment D1 – Blacklines**

**Generation Interconnection Process Reform Amendment Filing**

**4<sup>th</sup> Replacement MRTU Tariff**

\* \* \*

## **24 TRANSMISSION EXPANSION.**

\* \* \*

### **24.1.2 Reliability Driven Projects.**

The CAISO in coordination with each Participating TO with a PTO Service Territory will, consistent with the procedures set forth in the Business Practice Manual, identify the need for any transmission additions or upgrades required to ensure System Reliability consistent with all Applicable Reliability Criteria and CAISO Planning Standards. In making this determination, the CAISO, in coordination with each Participating TO with a PTO Service Territory and other Market Participants, shall consider lower cost alternatives to the construction of transmission additions or upgrades, such as acceleration or expansion of existing projects, Demand-side management, Remedial Action Schemes, appropriate Generation, interruptible Loads or reactive support. The CAISO shall direct each Participating TO with a PTO Service Area, as a registered Transmission Planner with NERC, to perform the necessary studies, based on the Unified Planning Assumptions and Study Plan as set forth in Section 24.2.3, any applicable Interconnection Study, and in accordance with the Business Practice Manual, to determine the facilities needed to meet all Applicable Reliability Criteria and CAISO Planning Standards. The Participating TO with a PTO Service Area shall provide the CAISO and other Market Participants with all information relating to the studies performed under this Section, subject to any limitation provided in Section 20.2 or the applicable LGIP. The CAISO shall be free to propose any transmission upgrades or additions it deems necessary to ensure System Reliability consistent with Applicable Reliability Criteria and CAISO Planning Standards. The Participating TO with a PTO Service Territory in which the transmission upgrade or addition deemed needed under this Section 24.1.2 is to be located shall be the Project Sponsor, with the responsibility to construct, own and finance, and maintain such transmission upgrade or addition.

\* \* \*

### **24.1.3.2 Demonstration of Interest in a Location Constrained Resource Interconnection Facility.**

A proponent of an LCRIF must demonstrate interest in the LCRIF equal to sixty percent (60%) or more of the capacity of the facility in the following manner:

(a) the proponent's demonstration must include a showing that LCRIGs that would connect to the facility and would have a combined capacity equal to at least twenty-five percent (25%) of the capacity of the facility have executed Large Generator Interconnection Agreements or Small Generator Interconnection Agreements, as applicable; and

(b) to the extent the showing pursuant to Section 24.1.3.2(a) does not constitute sixty percent (60%) of the capacity of the LCRIF, the proponent's demonstration of the remainder of the required minimum level of interest must include a showing that additional LCRIGs:

(1) in the case of Large Generating Facilities subject to the LGIP set forth in Appendix Y, have obtained Site Exclusivity or paid the Site Exclusivity Deposit in lieu of Site Exclusivity, provided that any Site Exclusivity Deposit paid pursuant to Section 3.5 of the LGIP set forth in Appendix Y shall satisfy this requirement, or, in the case of Large Generating Facilities subject to the LGIP set forth in Appendix U and Small Generating Facilities, have obtained control over their site or paid a deposit to the CAISO in the amount of \$250,000, which deposit shall be refundable if the LCRIF is not approved or is withdrawn by the proponent; and

(2) have demonstrated interest in the LCRIF by one of the following methods:

(i) executing a firm power sales agreement for the output of the LCRIG for a period of five years or longer; or

(ii) in the case of Large Generating Facilities subject to the LGIP set forth in Appendix Y, filing an Interconnection Request and paying

the Interconnection Study Deposit required by Section 3.5 of the LGIP set forth in Appendix Y; or

(iii) in the case of Large Generating Facilities subject to the LGIP set forth in Appendix U and Small Generating Facilities, being in the CAISO's interconnection queue and paying a deposit to the CAISO equal to the sum of the minimum deposits required of an Interconnection Customer for all studies performed in accordance with the Large Generator Interconnection Procedures (Appendix U) or Small Generator Interconnection Procedures (Appendix S), as applicable to the LCRIG, less the amount of any deposits actually paid by the LCRIG for such studies. The deposit shall be credited toward such study costs. If the LCRIF is not approved or is withdrawn by the proponent, any deposit paid under this provision shall be refundable to the extent it exceeds costs incurred by the CAISO for such studies; or

(iv) paying a deposit to the CAISO equal to five percent (5%) of the LCRIG's pro rata share of the capital costs of a proposed LCRIF. The deposit shall be credited toward ~~study costs of~~ Interconnection Studies performed in connection with the Large Generator Interconnection Procedures (Appendix U or Appendix Y, as applicable) or Small Generator Interconnection Procedures (Appendix S), whichever is applicable. If the LCRIF is not approved or is withdrawn by the proponent, any deposit paid under this provision shall be refundable to the extent it exceeds the costs incurred by the CAISO for such studies.

\* \* \*

In evaluating whether a proposed LCRIF that meets the requirements of Section 24.1.3.1 is needed, and for purposes of ranking and prioritizing LCRIF projects, the CAISO will consider the following factors:

- (a) Whether, and if so, the extent to which, the facility meets or exceeds applicable CAISO Planning Standards, including standards that are Applicable Reliability Criteria.
- (b) Whether, and if so, the extent to which, the facility has the capability and flexibility both to interconnect potential LCRIGs in the Energy Resource Area and to be converted in the future to a network transmission facility.
- (c) Whether the projected cost of the facility is reasonable in light of its projected benefits, in comparison to the costs and benefits of other alternatives for connecting Generating Units or otherwise meeting a need identified in the CAISO Transmission Planning Process, including alternatives that are not LCRIFs. In making this determination, the CAISO shall take into account, among other factors, the following:
  - (1) The potential capacity of LCRIGs and the potential Energy that could be produced by LCRIGs in each Energy Resource Area;
  - (2) The capacity of LCRIGs in the CAISO's interconnection ~~queue~~process for each Energy Resource Area;
  - (3) The projected cost and in-service date of the facility in comparison with other transmission facilities that could connect LCRIGs to the CAISO Controlled Grid;
  - (4) Whether, and if so, the extent to which, the facility would provide additional reliability or economic benefits to the CAISO Controlled Grid; and
  - (5) Whether, and if so, the extent to which, the facility would create a risk of stranded costs.

\* \* \*



## **24.2 Transmission Planning and Coordination.**

The CAISO shall perform the CAISO's Transmission Planning Process on an annual cycle in accordance with the terms of this CAISO Tariff, the Transmission Control Agreement, and the Business Practice Manual. The Transmission Planning Process shall, at a minimum:

- (a) Coordinate and consolidate the transmission needs of the CAISO Balancing Authority Area into a single plan, which will be assessed on the basis of maintaining the reliability of the CAISO Controlled Grid in accordance with Applicable Reliability Criteria and CAISO Planning Standards, in a manner that promotes the economic efficiency of the CAISO Controlled Grid and considers federal and state environmental and other policies affecting the provision of Energy.
- (b) Reflect a planning horizon covering a minimum of ten (10) years that considers transmission enhancements and expansions, Demand Forecasts, Demand-side management, and capacity forecasts relating to generation technology type, additions and retirements, and such other factors as the CAISO determines are relevant.
- (c) Seek to avoid unnecessary duplication of facilities and ensure the simultaneous feasibility of the CAISO Transmission Plan and the transmission plans of interconnected Balancing Authority Areas, and otherwise coordinate with regional and sub-regional transmission planning processes and entities in accordance with Section 24.8.
- (d) Identify existing and projected limitations of the CAISO Controlled Grid's physical, economic or operational capability or performance and identify transmission upgrades and additions, including alternatives thereto, deemed needed in accordance with Section 24.1 to address the existing and projected limitations.
- (e) Account for any effects on the CAISO Controlled Grid of the interconnection of

Generating Units on the Distribution System under the Wholesale Distribution Access Tariffs of the Participating TOs, including an assessment of the deliverability of such Generating Units on a basis comparable to the Deliverability Assessment performed under Appendix U or Appendix Y, as applicable.

\* \* \*

#### **24.2.2 Request Window.**

Market Participants may propose Economic Planning Studies and transmission upgrades or additions for inclusion in the annual Transmission Plan during a Request Window. The duration of the Request Window will be set forth in the Business Practice Manual and will occur in the year prior to the year in which the Transmission Plan is prepared. Proposals for Economic Planning Studies and transmission upgrades or additions must use the forms and satisfy the information and technical requirements set forth in the Business Practice Manual. Proposals for transmission additions or upgrades must be within or connect to the CAISO Balancing Authority Area or CAISO Controlled Grid and proposals for Economic Planning Studies must be intended to promote competition or economic efficiency of serving Load within the CAISO Balancing Authority Area, but may relate to Congestion relief or transmission capacity expansion outside the CAISO Balancing Authority Area. The following proposals will only be considered in the Transmission Plan if proposed during the Request Window:

- (a) Economic transmission upgrades or additions proposed under Section 24.1.1, except for projects costing less than \$50 million that are identified through Participating TO proposals provided pursuant to the Study Plan;
- (b) Location Constrained Resource Interconnection Facilities under Section 24.1.3 not identified by the CAISO as part of Interconnection Studies performed under the LGIP set forth in Appendix U or Appendix Y;
- (c) Demand response programs that are proposed for inclusion in the base case or assumptions for the Transmission Plan or as alternatives to transmission additions or upgrades;
- (d) Generation projects that are proposed as solutions to Congestion identified in

previously published Economic Planning Studies, for inclusion in long-term planning studies, or as alternatives to transmission additions or upgrades; and

- (e) Requests for Economic Planning Studies.

\* \* \*

### **24.2.3 Additional Planning Information.**

\* \* \*

#### **24.2.3.4 Information Requested from Interconnected Balancing Authority Areas, Sub-Regional Planning Groups and Electric Utility Regulatory Agencies.**

In accordance with Section 24.8 , the CAISO shall obtain or solicit from interconnected Balancing Authority Areas, regional and sub-regional planning groups within the WECC, the CPUC, the CEC, and Local Regulatory Authorities information required by, or anticipated to be useful to, the CAISO in its performance of the Transmission Planning Process, including, but not limited to (1) long-term transmission system plans; (2) long-term resource plans; (3) generation interconnection ~~queue~~process information; (4) Demand Forecasts; and (5) any other data necessary for the development of power flow, short-circuit, and stability cases over the planning horizon of the CAISO Transmission Planning Process.

\* \* \*

### **24.2.4 Unified Planning Assumptions and Study Plan.**

#### **24.2.4.1 Additional Projects and Data for Development of the Unified Planning Assumptions and Study Plan.**

The CAISO will develop Unified Planning Assumptions and Study Plan using information and data received during the Request Window and under Section 24.2.3. The CAISO will also use the following in the development of the Unified Planning Assumptions and Study Plan:

- (1) WECC base cases for the relevant planning horizon;
- (2) transmission upgrades and additions approved by the CAISO and scheduled to be energized within the planning horizon;
- (3) Location Constrained Resource Interconnection Facilities conditionally approved under Section 24.1.3.1(a);

- (4) Network Upgrades identified pursuant to Section 25, Appendix U, Appendix Y, or Appendix W relating to the CAISO's Large Generator Interconnection Procedures and Appendix SAA relating to the CAISO's Small Generator Interconnection Procedures;
- (5) operational solutions validated by the CAISO to address Local Capacity Area Resource requirements;
- (6) regulatory initiatives, as appropriate, including state regulatory agency initiated programs;
- (7) Energy Resource Areas or similar resource areas identified as high priority by the CPUC or CEC; and
- (8) results and analyses from Economic Planning Studies or other assessments that may have identified potentially needed transmission upgrades or additions performed in past CAISO Transmission Planning Process cycles.

\* \* \*

#### **24.2.5 Development and Approval of Transmission Plan.**

\* \* \*

##### **24.2.5.2 Development of Transmission Plan.**

- (a) In accordance with the schedule and procedures in the Business Practice Manual, the CAISO will post a draft Transmission Plan. The CAISO will subsequently conduct a stakeholder conference regarding the draft Transmission Plan and solicit comments, consistent with the timelines and procedures set forth in the Business Practice Manual. Additional stakeholder meetings, web conferences, or teleconferences may be scheduled as needed. All stakeholder meetings, web conferences, or teleconferences shall be noticed by Market Notice and such notice shall be posted to the CAISO Website. After consideration of comments, the CAISO will post a final Transmission Plan to the CAISO Website.

- (b) The draft and final Transmission Plan may include, but is not limited to: (1) the results of technical studies performed under the Study Plan; (2) determinations, recommendations, and justifications for the need, according to Section 24.1 for identified transmission upgrades and additions; (3) assessments of transmission upgrades and additions not proposed under Section 24.1 and for which need has not been formally determined by the CAISO Governing Board or management, as applicable, under Section 24.1, but which have been identified by the CAISO as potential solutions to transmission needs studied during the Transmission Planning Process cycle; ~~(4)~~ results of Economic Planning Studies performed during the Transmission Planning Process cycle; ~~and~~ ~~(5)~~ an update on the status of transmission upgrades or additions previously approved by the CAISO, including identification of mitigation plans, if necessary, to address any potential delay in the anticipated completion of an approved transmission upgrade or addition; and (6) to the extent available, the results of Interconnection Studies.
- (c) The Transmission Plan may not include the results of certain technical studies performed as part of the Transmission Planning Process cycle identified in the Unified Planning Assumptions and Study Plan that were scheduled for completion after publication of the Transmission Plan for the Transmission Planning Process cycle.

\* \* \*

## **25 INTERCONNECTION OF GENERATING UNITS AND GENERATING FACILITIES TO THE CAISO CONTROLLED GRID.**

### **25.1 Applicability.**

This Section 25 and Appendix U (the Standard Large Generator Interconnection Procedures (LGIP)), Appendix Y (the LGIP for Interconnection Requests in a Queue Cluster Window), Appendix S (the Small Generator Interconnection Procedures (SGIP)), or Appendix W, as applicable, shall apply to:

- (a) each new Generating Unit that seeks to interconnect to the CAISO Controlled

Grid;

- (b) each existing Generating Unit connected to the CAISO Controlled Grid that will be modified with a resulting increase in the total capability of the power plant;
- (c) each existing Generating Unit connected to the CAISO Controlled Grid that will be modified without increasing the total capability of the power plant but has changed the electrical characteristics of the power plant such that its re-energization may violate Applicable Reliability Criteria; and
- (d) each existing Qualifying Facility Generating Unit connected to the CAISO Controlled Grid whose total Generation was previously sold to a Participating TO or on-site customer but whose Generation, or any portion thereof, will now be sold in the wholesale market, subject to Section 25.1.2.

**25.1.1** The owner of a Generating Unit described in Section 25.1 (a), (b), or (c), or its designee, shall be an Interconnection Customer required to submit an Interconnection Request and comply with Appendix U (the LGIP), Appendix Y (the LGIP for Interconnection Requests in a Queue Cluster Window), Appendix S (the SGIP), or Appendix W, as applicable, which applicability shall be based on the maximum rated capacity of the new total capability of the power plant, including the capability of all of multiple energy production devices at a site, consistent with Section 4.10 of the SGIP.

\* \* \*

**25.1.2.1** If the CAISO and the applicable Participating TO confirm that the electrical characteristics are substantially unchanged, then that request will not be placed into the interconnection queue. However, the owner of the Qualifying Facility, or its designee, will be required to execute a Standard Large Generator Interconnection Agreement in accordance with Section 11 of Appendix U (the LGIP), a Large Generator Interconnection Agreement in accordance with Section 11 of Appendix Y (the LGIP for Interconnection Requests in a Queue Cluster Window), a Small Generator Interconnection Agreement in accordance with Section 3.3.4, 3.4.5, or 3.5.7 and Section 4.8 of the SGIP, or an interconnection agreement in accordance with Appendix W, as applicable.

**25.1.2.2** If the CAISO and the applicable Participating TO cannot confirm that the total capability

and electrical characteristics are and will be substantially unchanged, then the owner of the Qualifying Facility, or its designee, shall be an Interconnection Customer required to submit an Interconnection Request and comply with Appendix U (the LGIP), Appendix Y (the LGIP for Interconnection Requests in a Queue Cluster Window), Appendix S (the SGIP), or Appendix W, as applicable.

## **25.2 Interconnections to the Distribution System.**

Any proposed interconnection by the owner of a planned Generating Unit, or its designee, to connect that Generating Unit to a Distribution System of a Participating TO will be processed, as applicable, pursuant to the Wholesale Distribution Access Tariff or CPUC Rule 21, or other Local Regulatory Authority requirements, if applicable, of the Participating TO; provided, however, that the owner of the planned Generating Unit, or its designee, shall be required to mitigate any adverse impact on reliability of the CAISO Controlled Grid consistent with Appendix U (the Standard Large Generator Interconnection Procedures) and Appendix Y (the LGIP for Interconnection Requests in a Queue Cluster Window). In addition, each Participating TO will provide to the CAISO a copy of the system impact study used to determine the impact of a planned Generating Unit on the Distribution System and the CAISO Controlled Grid pursuant to a request to interconnect under the applicable Wholesale Distribution Access Tariff or CPUC Rule 21, or other Local Regulatory Authority requirements, if applicable.

## **25.3 Maintenance of Encumbrances.**

No new Generating Unit shall adversely affect the ability of the applicable Participating TO to honor its Encumbrances existing as of the time an Interconnection Customer submits its Interconnection Request to the CAISO. The applicable Participating TO, in consultation with the CAISO, shall identify any such adverse effect on its Encumbrances in the Interconnection System Impact Study performed under Section 7 of Appendix U (the LGIP), the Phase I Interconnection Study performed under Section 6 of Appendix Y (the LGIP for Interconnection Requests in a Queue Cluster Window), the system impact study performed under Section 3.4 of the SGIP, or the System Impact Study performed under Section 5.1 of Appendix W, as applicable. To the extent the applicable Participating TO determines that the connection of the new Generating Unit will have an adverse effect on Encumbrances, the Interconnection Customer shall mitigate such adverse effect.

## CAISO Tariff Appendix A

### Master Definitions Supplement

\* \* \*

#### **Commercial Operation**

The status of a Generating Unit or project phase at a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

#### **Commercial Operation Date**

The date on which a Generating Unit or project phase at a Generating Facility commences Commercial Operation as agreed to by the applicable Participating TO, the CAISO, and the Interconnection Customer pursuant to Appendix E to the ~~Standard~~ Large Generator Interconnection Agreement, and in accordance with the implementation plan agreed to by the Participating TO and the CAISO for multiple individual Generating Units or project phases at a Generating Facility where an Interconnection Customer intends to establish separate Commercial Operation Dates for those Generating Units or project phases.

\* \* \*

#### **Construction Activities**

Actions by a Participating TO that result in irrevocable financial commitments for the purchase of major electrical equipment or land for Participating TO's Interconnection Facilities or Network Upgrades assigned to the Interconnection Customer that occur after receipt of all appropriate governmental approvals needed for the Participating TO's Interconnection Facilities or Network Upgrades.

\* \* \*

#### **Full Capacity Deliverability Status**

The condition whereby a Large Generating Facility interconnected with the CAISO Controlled Grid, under coincident CAISO Balancing Authority Area peak Demand and a variety of severely stressed system conditions, can deliver the Large Generating Facility's full output to the aggregate of Load on the CAISO Controlled Grid, consistent with the CAISO's Reliability Criteria and procedures and the CAISO On-Peak Deliverability Assessment.

\* \* \*



**Group Study**

The process whereby more than one Interconnection Request is studied together, instead of individually, for the purpose of conducting one or more of the Interconnection Studies or analyses therein.

\* \* \*

**Interconnection Base Case Data**

Data including, but not limited to, base power flow, short circuit and stability databases, underlying Load, Generation, and transmission facility assumptions, Contingency lists, including relevant Remedial Action Schemes, per unit costs, and transmission diagrams used to perform Phase I Interconnection Studies and Phase II Interconnection Studies. Interconnection Base Case Data may include Critical Energy Infrastructure Information (as that term is defined by FERC). The Interconnection Base Case Data shall include transmission facilities approved by the CAISO under Section 24 and Network Upgrades associated with Generation Facilities in (iv) below and Generating Facilities that (i) are directly interconnected to the CAISO Controlled Grid; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending request to interconnect to an Affected System; or (iv) are not interconnected to the CAISO Controlled Grid, but are subject to a fully executed LGIA (or its equivalent predecessor agreement) or for which an unexecuted LGIA (or its equivalent predecessor agreement) has been requested to be filed with FERC. To the maximum extent practicable, the Interconnection Base Case Data shall utilize the Unified Planning Assumptions developed pursuant to Section 24.2.4.

\* \* \*

**Interconnection Customer's Interconnection Facilities**

All facilities and equipment, as identified in ~~Part~~ Appendix A of the ~~Standard~~-Large Generator Interconnection Agreement, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the CAISO Controlled Grid. Interconnection Customer's Interconnection Facilities are sole use facilities.

\* \* \*

**Interconnection Financial Security**

Any of the financial instruments listed in LGIP Section 9.1 set forth in Appendix Y that are posted by an Interconnection Customer.

\* \* \*

**Interconnection Request**

An Interconnection Customer's request, in the form of ~~Part~~Appendix 1 to the ~~Standard~~-Large Generator Interconnection Procedures or Attachment 2 to the Small Generator Interconnection Procedures, in accordance with Section 25.1.

**Interconnection Service**

The service provided by the Participating TO and CAISO associated with interconnecting the Interconnection Customer's Generating Facility to the CAISO Controlled Grid and enabling it to receive electric Energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of the ~~Standard~~-Large Generator Interconnection Agreement, the Participating TO's TO Tariff, and the CAISO Tariff.

**Interconnection Study**

Any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, and the Interconnection Facilities Study described in the Standard Large Generator Interconnection Procedures set forth in Appendix U or the Phase I Interconnection Study and the Phase II Interconnection Study described in the LGIP set forth in Appendix Y.

\* \* \*

**Interconnection Study Cycle**

All requirements, actions, and respective obligations of the CAISO, Participating TO, and Interconnection Customer under the LGIP set forth in Appendix Y applicable to an Interconnection Request submitted in a particular Queue Cluster Window through execution by the parties or submission to FERC by one or more of the parties of an LGIA.

\* \* \*

**Interconnection Study Deposit**

The cash deposit provided to the CAISO by Interconnection Customers under LGIP Section 3.5.1 set forth in Appendix Y as a requirement of a valid Interconnection Request to be used to offset the cost of the Interconnection Studies as set forth in LGIP Sections 3.5.1.2 and 3.5.1.3 set forth in Appendix Y.

\* \* \*

**Large Generator Interconnection Agreement (LGIA)**

The form of interconnection agreement applicable to an Interconnection Request pertaining to a Large Generating Facility, a *pro forma* version of which is set forth in Appendix V or Appendix Z, as applicable.~~Standard Large Generator Interconnection Agreement~~

**Large Generator Interconnection**

The interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that are set forth in

**Procedures (LGIP)**

Appendix U or Appendix Y, as applicable, Standard Large Generator Interconnection Procedures

**Large Generator Interconnection Study Process Agreement (LGISPA)**

The agreement between the CAISO and the Interconnection Customer for conducting the Interconnection Studies for a proposed Large Generating Facility, a *pro forma* version of which is accepted by FERC, posted on the CAISO Website, and set forth in Appendix Y.

\* \* \*

**LGISPA**

Large Generator Interconnection Study Process Agreement

\* \* \*

**Off-Peak Deliverability Assessment**

The technical study performed under LGIP Section 6.3.2.2 set forth in Appendix Y.

\* \* \*

**On-Peak Deliverability Assessment**

The technical study performed under LGIP Section 6.3.2.1 set forth in Appendix Y.

\* \* \*

**Participating TO's Interconnection Facilities**

All facilities and equipment owned, controlled, or operated by the Participating TO from the Point of Change of Ownership to the Point of Interconnection as identified in ~~Part~~Appendix A to the Standard Large Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Participating TO's Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

\* \* \*

**Phase I Interconnection Study**

The engineering study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), that evaluates the impact of the proposed interconnection on the safety and reliability of the CAISO Controlled Grid and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility(ies) were interconnected without identified project modifications or system modifications, as provided in the On-Peak Deliverability Assessment or Off-Peak Deliverability Assessment, and other potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Large Generator Interconnection Procedures set forth in Appendix Y. The

study will also identify the approximate total costs, based on per unit costs, of mitigating these impacts, along with an equitable allocation of those costs to Interconnection Customers for their individual Generating Facilities.

\* \* \*

**Phase II Interconnection Study**

An engineering and operational study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), to determine the Point of Interconnection and a list of facilities (including the Participating TO's Interconnection Facilities, Network Upgrades, Distribution Upgrades, and Stand Alone Network Upgrades), the cost of those facilities, and the time required to interconnect the Generating Facility(ies) with the CAISO Controlled Grid.

\* \* \*

**Point of Change of Ownership**

The point, as set forth in ~~Part~~Appendix A to the ~~Standard~~-Large Generator Interconnection Agreement, where the Interconnection Customer's Interconnection Facilities connect to the Participating TO's Interconnection Facilities.

\* \* \*

**Point of Interconnection**

The point, as set forth in ~~Part~~Appendix A to the ~~Standard~~-Large Generator Interconnection Agreement or Attachment 3 to the Small Generator Interconnection Agreement, where the Interconnection Facilities connect to the CAISO Controlled Grid.

\* \* \*

**Pre-Construction Activities**

Actions by a Participating TO, other than those required by an Engineering and Procurement Agreement under LGIP Section 10 in Appendix Y, undertaken prior to Construction Activities in order to prepare for the construction of Participating TO's Interconnection Facilities or Network Upgrades assigned to the Interconnection Customer, including, but not limited to, preliminary engineering, permitting activities, environmental analysis, or other activities specifically needed to obtain governmental approvals for the Participating TO's Interconnection Facilities or Network Upgrades.

\* \* \*

**Reliability Network Upgrades**

The transmission facilities at or beyond the Point of Interconnection identified in the Interconnection Studies as necessary to interconnect

one or more Large Generating Facility(ies) safely and reliably to the CAISO Controlled Grid, which would not have been necessary but for the interconnection of one or morethe Large Generating Facility(ies), including Network Upgrades necessary to remedy short circuit or stability problems, or thermal overloads. Reliability Network Upgrades shall only be deemed necessary for thermal overloads, occurring under any system condition, where such thermal overloads cannot be adequately mitigated through Congestion Management, Operating Procedures, or Special Protection Systems based on the characteristics of the Large Generating Facilities included in the Interconnection Studies, limitations on market models, systems, or information, or other factors specifically identified in the Interconnection Studies resulting from the interconnection of the Large Generating Facility to the CAISO Controlled Grid. Reliability Network Upgrades also include, consistent with WECC practice, the facilities necessary to mitigate any adverse impact the Large Generating Facility's interconnection may have on a path's WECC rating.

\* \* \*

### **Results Meeting**

The meeting among the CAISO, the applicable Participating TO(s), the Interconnection Customer, and, if applicable, other Affected System Operators to discuss the results of the Phase I Interconnection Study as set forth in LGIP Section 6 set forth in Appendix Y.

\* \* \*

### **Site Exclusivity**

Documentation reasonably demonstrating:

(1) For private land:

(a) Ownership of, a leasehold interest in, or a right to develop property upon which the Generating Facility will be located consisting of a minimum of 50% of the acreage reasonably necessary to accommodate the Generating Facility; or

(b) an option to purchase or acquire a leasehold interest in property upon which the Generating Facility will be located consisting of a minimum of 50% of the acreage reasonably necessary to accommodate the Generating Facility.

(2) For public land, including that controlled or managed by any federal, state or local agency, a final, non-appealable permit, license, or other right to use the property for the purpose of

generating electric power and in acreage reasonably necessary to accommodate the Generating Facility, which exclusive right to use public land under the management of the federal Bureau of Land Management shall be in a form specified by the Bureau of Land Management.

\* \* \*

**Site Exclusivity Deposit**

The cash deposit provided to the CAISO by Interconnection Customers under LGIP Section 3.5.1 set forth in Appendix Y as an option in lieu of demonstrating Site Exclusivity for a valid Interconnection Request and treated in accordance with LGIP Section 3.5.1.4 set forth in Appendix Y.

\* \* \*

**Stand Alone Network Upgrades**

Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the CAISO Controlled Grid or Affected Systems during their construction. The Participating TO, the CAISO, and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the ~~Standard-Large~~ Generator Interconnection Agreement.

\* \* \*

**CAISO TARIFF APPENDIX T**

**Small Generator Interconnection Agreement (SGIA)**

\* \* \*

1.5 Responsibilities of the Parties

1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice. The Parties shall use the ~~Standard-Large~~ Generator Interconnection Agreement (CAISO Tariff Appendix V or Appendix Z, as applicable) to interpret the responsibilities of the Parties under this Agreement.

\* \* \*

**CAISO TARIFF APPENDIX U**

**Standard Large Generator Interconnection Procedures (LGIP)**

\* \* \*

**Section 1. Objectives and Definitions.**

**1.1 Objectives**

The objective of this LGIP is to implement FERC's Order No. 2003 setting forth the requirements for Large Generating Facility interconnections to the CAISO Controlled Grid. This LGIP applies to Interconnection Requests not assigned to a Queue Cluster Window pursuant to the terms of this

CAISO Tariff for the performance of its Interconnection Studies.

\* \* \*

**Section 2. Scope and Application.**

**2.1 Application of Standard Large Generator Interconnection Procedures.**

Sections 2 through 13 of this LGIP apply to processing an Interconnection Request pertaining to a Large Generating Facility that is not assigned to a Queue Cluster Window pursuant to the terms of this CAISO Tariff for the performance of its Interconnection Studies.

\* \* \*

**Section 11. Standard Large Generator Interconnection Agreement (LGIA).**

**11.1 Tender.**

**11.1.1** Within thirty (30) calendar days after the CAISO receives the Interconnection Customer's written comments, or notification of no comments, to the draft Interconnection Facilities Study report, the applicable Participating TO(s) and the CAISO shall tender a draft LGIA, together with draft appendices. The draft LGIA shall be in the form of the FERC-approved standard form LGIA set forth in CAISO Tariff Appendix V. The Interconnection Customer shall provide written comments, or notification of no comments, to the draft appendices to the applicable Participating TO(s) and the CAISO within (30) calendar days of receipt.

\* \* \*

**CAISO TARIFF APPENDIX V**

**Standard Large Generator Interconnection Agreement (LGIA)**

\* \* \*

**ARTICLE 1. DEFINITIONS**

\* \* \*

**Standard Large Generator Interconnection Procedures (LGIP)** shall mean the CAISO protocol that sets forth the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that is included in ~~the~~ CAISO Tariff Appendix U.

\* \* \*

**Attachment D2 – Blacklines**  
**Generation Interconnection Process Reform Amendment Filing**

**4<sup>th</sup> Replacement MRTU Tariff**



\* \* \*

CAISO TARIFF APPENDIX Y

~~{NOT USED}~~

~~{Ten Sheet Numbers Reserved for Export Priority Filing.}~~

Large Generator Interconnection Procedures (LGIP)  
for Interconnection Requests in a Queue Cluster Window

Large Generator  
Interconnection Procedures (LGIP)

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## **Section 1 Objectives and Definitions.**

### **1.1 Objectives and Applicability.**

The objective of this LGIP is to implement the requirements for Large Generating Facility interconnections to the CAISO Controlled Grid. This LGIP applies to Interconnection Requests assigned to a Queue Cluster Window pursuant to the terms of this CAISO Tariff for the performance of its Interconnection Studies.

### **1.2 Definitions.**

#### **1.2.1 Master Definitions Supplement.**

Unless the context otherwise requires, any word or expression defined in the Master Definitions Supplement, Appendix A to the CAISO Tariff, shall have the same meaning where used in this LGIP. References to LGIP are to this Appendix Y.

#### **1.2.2 Special Definitions for this LGIP.**

In this LGIP, the following words and expressions shall have the meanings set opposite them:

“**Confidential Information**” shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, subject to Section 13.1 of this LGIP.

“**Dispute Resolution**” shall mean the procedure set forth in this LGIP for resolution of a dispute between the Parties.

“**Force Majeure**” shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

“**Governmental Authority**” shall mean any federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, CAISO, or Participating TO, or any Affiliate thereof.

“**Party**” or “**Parties**” shall mean the CAISO, Participating TO(s), Interconnection Customer or the applicable combination of the above.

“**Reasonable Efforts**” shall mean, with respect to an action required to be attempted or taken by a Party under the Large Generator Interconnection Procedures, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

“**Roles and Responsibilities Agreement**” shall mean the Agreement for the Allocation of Responsibilities with Regard to Large Generator Interconnection Procedures and Interconnection Study Agreements, a *pro forma* version of which is attached to this LGIP.

## **Section 2 Scope and Application.**

### **2.1 Application of Large Generator Interconnection Procedures.**

Sections 2 through 13 of this LGIP apply to processing an Interconnection Request pertaining to a Generating Facility assigned to a Queue Cluster Window pursuant to the terms of this CAISO Tariff for the performance of its Interconnection Studies. Appendix 2 of this LGIP sets forth exceptions to the provisions of this LGIP that apply to processing an Interconnection Request pertaining to a Generating Facility that meets the criteria set forth in LGIP Appendix 2.

### **2.2 Comparability.**

The CAISO shall receive, process, and analyze Interconnection Requests in a timely manner as set forth in this LGIP. The CAISO will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers as set forth in this LGIP, whether the Generating Facilities are owned by a Participating TO, its subsidiaries, or Affiliates or others.

### **2.3 Interconnection Base Case Data.**

For each Interconnection Study Cycle, the CAISO, in coordination with applicable Participating TO(s), shall publish updated Interconnection Base Case Data, including, as applicable, separate Interconnection Base Case Data for each Group Study to reflect system conditions particular to the Group Study, to a secured section of the CAISO Website: (1) prior to the Phase I Interconnection Study with the Generation reflected in valid Interconnection Requests submitted in the Queue Cluster Window for the Interconnection Study Cycle; (2) after the Phase I Interconnection Study with the Generation reflected in valid Interconnection Requests submitted in the Queue Cluster Window for the Interconnection Study Cycle, and the identified preliminary transmission upgrades or additions, (3) prior to the Phase II Interconnection Study, including all remaining Generation from the Phase I Interconnection Study for the Interconnection Study Cycle; and (4) after the Phase II Interconnection Study, including all remaining Generation from the applicable Phase I Interconnection Study and the identified transmission upgrades and additions for the Interconnection Study Cycle.

Interconnection Base Case Data shall not include information subject to the confidentiality provisions in LGIP Section 13.1.

The CAISO shall require current and former Interconnection Customers, Market Participants, and electric utility regulatory agencies within California to sign a CAISO confidentiality agreement and, where the current or former Interconnection Customer or Market Participant is not a member of WECC, or its successor, an appropriate form of agreement with WECC, or its successor, as necessary. All other entities or persons seeking Interconnection Base Case Data must satisfy the foregoing requirements as well all requirements under 18 C.F.R. Section 388.113 for obtaining the release of Critical Energy Infrastructure Information (as that term is defined by FERC).

### **2.4 Interconnection Service and Studies.**

#### **2.4.1 No Applicability to Transmission Service.**

Nothing in this LGIP shall constitute a request for transmission service or confer upon an Interconnection Customer any right to receive transmission service.

#### **2.4.2 The Product.**

Interconnection Service allows the Interconnection Customer to connect the Large Generating Facility to the CAISO Controlled Grid and be eligible to deliver the Large Generating Facility's output using the available capacity of the CAISO Controlled Grid. Interconnection Service does not in and of itself convey any right to deliver electricity to any specific customer or point of delivery or rights to any specific MW of available capacity on the CAISO Controlled Grid.

### **2.4.3 The Interconnection Studies.**

The Interconnection Studies consist of a Phase I Interconnection Study and a Phase II Interconnection Study, which will include, but not be limited to, short circuit/fault duty, steady state (thermal and voltage) and stability analyses. The Interconnection Studies will identify direct Interconnection Facilities and required Reliability Network Upgrades necessary to mitigate thermal overloads and voltage violations, and address short circuit, stability, and reliability issues associated with the requested Interconnection Service.

The Interconnection Studies will also identify Delivery Network Upgrades to allow the full output of a Large Generating Facility selecting Full Capacity Deliverability Status, and, as applicable, the maximum allowed output of the interconnecting Large Generating Facility without one or more Delivery Network Upgrades in accordance with the On-Peak Deliverability Assessment and Off-Peak Deliverability Assessment set forth in LGIP Section 6.3.2.

## **Section 3 Interconnection Requests.**

### **3.1 General.**

Pursuant to CAISO Tariff Section 25.1, an Interconnection Customer shall submit to the CAISO an Interconnection Request in the form of Appendix 1 to this LGIP. The CAISO will forward a copy of the Interconnection Request to the applicable Participating TO within three (3) Business Days of receipt.

The Interconnection Customer shall submit a separate Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. The Interconnection Customer must submit a deposit with each Interconnection Request even when more than one request is submitted for a single site. An Interconnection Request to evaluate one site at two different voltage levels shall be treated as two Interconnection Requests.

### **3.2 Roles and Responsibilities.**

- (a) Each Interconnection Request will be subject to the direction and oversight of the CAISO. The CAISO will conduct or cause to be performed the required Interconnection Studies and any additional studies the CAISO determines to be reasonably necessary, and will direct the applicable Participating TO to perform portions of studies where the Participating TO has specific and non-transferable expertise or data and can conduct the studies more efficiently and cost effectively than the CAISO. The CAISO will coordinate with Affected System Operators in accordance with LGIP Section 3.7.
- (b) The CAISO will complete or cause to be completed all studies as required within the timelines provided in this LGIP. Any portion of the studies performed at the direction of the CAISO by the Participating TOs or by a third party shall also be completed within timelines provided in this LGIP.



- (c) The CAISO has established a *pro forma* Roles and Responsibilities Agreement, attached hereto as Appendix 4 and incorporated herein by reference, for execution by the CAISO and the applicable Participating TOs.
- (d) Each Interconnection Customer shall pay the actual costs of all Interconnection Studies, and any additional studies the CAISO determines to be reasonably necessary in response to the Interconnection Request. The CAISO shall reimburse the Participating TO for the actual cost of any portion of all Interconnection Studies that such Participating TO performs at the direction of the CAISO.

### **3.3 Queue Cluster Windows.**

Interconnection Requests must be submitted during a Queue Cluster Window. Separate Queue Cluster Windows shall be established as follows: (i) as provided for in LGIP Appendix 2, Section 1.1; (ii) opening on June 2, 2008 and closing on July 31, 2009; (iii) opening on October 1, 2009 and closing on January 31, 2010; and (iv) thereafter, each calendar year shall have two Queue Cluster Windows with opening and closing dates as set forth in the Business Practice Manual.

Any changes to the Queue Cluster Window interval and opening or closing dates set forth in the Business Practice Manual shall be made in accordance with CAISO Tariff Section 22.11.

### **3.4 [NOT USED]**

### **3.5 Processing of Interconnection Request.**

#### **3.5.1 Initiating an Interconnection Request.**

To initiate an Interconnection Request, except as set forth in LGIP Section 3.5.1.1, the Interconnection Customer must submit during a Queue Cluster Window all of the following: (i) a \$250,000 Interconnection Study Deposit, (ii) a completed application in the form of LGIP Appendix 1, including requested deliverability status, preferred Point of Interconnection and voltage level, and all other required technical data, and (iii) demonstration of Site Exclusivity or a posting of a Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity, at a minimum, must be through the Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility.

##### **3.5.1.1 Initiating an Interconnection Request for Certain Small and Existing Generating Facilities.**

An Interconnection Customer submitting an Interconnection Request relating to (a) a Small Generating Facility seeking a Deliverability Assessment or (b) a Generating Facility, subject to the LGIP in accordance with CAISO Tariff Section 25.1.1, that has achieved Commercial Operation prior to the date of the Interconnection Request, and is seeking to increase the capacity of the Generating Facility by less than 20 MW, must submit during a Queue Cluster Window all of the following: (i) a \$100,000 Interconnection Study Deposit, (ii) a completed application in the form of LGIP Appendix 1, including requested deliverability status, preferred Point of Interconnection and voltage level, and all other required technical data, and (iii) demonstration of Site Exclusivity, which for a Generation Facility under (b) above shall be Site Exclusivity sufficient to accommodate the added capacity, or a posting of an additional Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity, at a minimum, must be through the Commercial Operation Date of the new Generating Facility or increase in capacity of the existing Generating Facility.

### **3.5.1.2 Use of Interconnection Study Deposit.**

The CAISO shall deposit all Interconnection Study Deposits in an interest bearing account at a bank or financial institution designated by the CAISO. The Interconnection Study Deposit shall be applied to pay for prudent costs incurred by the CAISO, the Participating TOs, or third parties at the direction of the CAISO or Participating TOs, as applicable, to perform and administer the Interconnection Studies.

The Interconnection Study Deposits shall be refundable as follows:

- (a) Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under LGIP Section 3.8 on or before thirty (30) calendar days following the Scoping Meeting, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceed the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.
- (b) Should an Interconnection Request made under LGIP Section 3.5.1 be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under LGIP Section 3.8 more than thirty (30) calendar days after the Scoping Meeting, but on or before thirty (30) calendar days following the Results Meeting for the Phase I Interconnection Study, the CAISO shall refund to the Interconnection Customer the difference between (i) the Interconnection Customer's Interconnection Study Deposit and (ii) the greater of the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf or \$100,000, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal.
- (c) Should an Interconnection Request made under LGIP Section 3.5.1.1 be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under LGIP Section 3.8 more than thirty (30) calendar days after the Scoping Meeting, but on or before thirty (30) calendar days following the Results Meeting for the Phase I Interconnection Study, the CAISO shall refund to the Interconnection Customer the difference between (i) the Interconnection Customer's Interconnection Study Deposit and (ii) the greater of the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf or \$50,000, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal.
- (d) Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under LGIP Section 3.8 at any time more than thirty (30) calendar days after the Results Meeting for the Phase I Interconnection Study, the Interconnection Study Deposit shall be non-refundable.
- (e) Upon execution of an LGIA by an Interconnection Customer, the CAISO and the applicable Participating TOs, or the approval by FERC of an unexecuted LGIA, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceeds the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.

Notwithstanding the foregoing, an Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request during an Interconnection Study Cycle shall be obligated to pay to the CAISO all costs in excess of the Interconnection Study Deposit that have been prudently incurred or irrevocably have been committed to be incurred with respect to that Interconnection Request prior to withdrawal. The CAISO will reimburse the applicable Participating TO(s) or third parties, as applicable, for all work performed on behalf of the withdrawn Interconnection Request at the CAISO's direction. The Interconnection Customer must pay all monies due before it is allowed to obtain any Interconnection Study data or results.

All non-refundable portions of the Interconnection Study Deposit that exceed the costs the CAISO, Participating TOs, or third parties have incurred on the Interconnection Customer's behalf shall be treated in accordance with CAISO Tariff Section 37.9.4.

### **3.5.1.3 Obligation for Study Costs.**

Except as otherwise provided in LGIP Section 3.5.1.2, the CAISO shall charge and the Interconnection Customer(s) shall pay the actual costs of the Interconnection Studies. Where an Interconnection Study is performed by means of a Group Study, the cost of the Group Study will be charged pro rata to each Interconnection Request assigned to the Group Study. The cost of Interconnection Studies performed for an individual Interconnection Request, not part of a Group Study, will be charged solely to the Interconnection Customer that submitted the Interconnection Request.

The CAISO shall issue invoices for Interconnection Studies that shall include a detailed and itemized accounting of the cost of each Interconnection Study. The CAISO shall draw from the Interconnection Study Deposit any undisputed costs within thirty (30) calendar days of issuance of an invoice. Whenever the actual cost of performing the Interconnection Studies exceeds the Interconnection Study Deposit, the Interconnection Customer shall pay the undisputed difference in accordance with the CAISO issued invoice within thirty (30) calendar days. The CAISO shall not be obligated to continue to have any studies conducted unless the Interconnection Customer has paid all undisputed amounts in compliance herewith. In the event an Interconnection Study, or portions thereof, is performed by the CAISO, the Interconnection Customer shall pay only the costs of those activities performed by the Participating TO to adequately review or validate that Interconnection Study or portions thereof.

### **3.5.1.4 Use of Site Exclusivity Deposit.**

The CAISO shall deposit all Site Exclusivity Deposits in an interest bearing account at a bank or financial institution designated by the CAISO. The Site Exclusivity Deposit shall be refundable to the Interconnection Customer at any time upon demonstration of Site Exclusivity or the Interconnection Request is withdrawn by the Interconnection Customer or deemed withdrawn by the CAISO by written notice under LGIP Section 3.8. The refund of the Site Exclusivity Deposit shall include interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal. The Site Exclusivity Deposit shall continue to be required after the Interconnection Customer either executes an LGIA or requests the filing of an unexecuted LGIA under LGIP Section 11 if Site Exclusivity has not been demonstrated.

### **3.5.1.5 Proposed Commercial Operation Date.**

The proposed Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility shall not exceed seven years from the date the Interconnection Request is received by the CAISO, unless the

Interconnection Customer demonstrates, and the applicable Participating TO(s) and the CAISO agree, such agreement not to be unreasonably withheld, that engineering, permitting and construction of the new Large Generating Facility or increase in capacity of the existing Generating Facility will take longer than the seven year period.

### **3.5.2 Validation of Interconnection Request.**

#### **3.5.2.1 Acknowledgment of Interconnection Request.**

The CAISO shall notify the Interconnection Customer within six (6) Business Days of receipt of the Interconnection Request, which notice shall state whether the Interconnection Request is deemed valid.

#### **3.5.2.2 Deficiencies in Interconnection Request.**

An Interconnection Request will not be considered to be a valid request until all items in LGIP Section 3.5.1 have been received and deemed valid by the CAISO. If an Interconnection Request fails to meet the requirements set forth in LGIP Section 3.5.1, the CAISO shall include in its notification to the Interconnection Customer under LGIP Section 3.5.2.1 the reasons for such failure and that the Interconnection Request does not constitute a valid request. The Interconnection Customer shall provide the CAISO the additional requested information needed to constitute a valid request. Whenever additional requested information is provided by the Interconnection Customer, the CAISO shall notify the Interconnection Customer within three (3) Business Days of receipt of the additional requested information whether the Interconnection Request is valid. If the Interconnection Request continues to fail to meet the requirements set forth in LGIP Section 3.5.1, the CAISO shall include in its notification to the Interconnection Customer the reasons for such failure. If an Interconnection Request has not been deemed valid, the Interconnection Customer must submit all information necessary to meet the requirements of LGIP Section 3.5.1 no later than twenty (20) calendar days after the close of the applicable Queue Cluster Window or ten (10) calendar days after the CAISO first provided notice that the Interconnection Request was not valid, whichever is later. Interconnection Requests that have not met the requirements of LGIP Section 3.5.1 within twenty (20) calendar days after the close of the applicable Queue Cluster Window or ten (10) calendar days after the CAISO first provided notice that the Interconnection Request was not valid, whichever is later, will not be included in Interconnection Study Cycle and will be deemed invalid.

Interconnection Requests deemed invalid under this LGIP Section 3.5.2.2 are not subject to LGIP Section 3.8. Interconnection Customers with invalid Interconnection Request under this LGIP Section 3.5.2.2 may seek relief under LGIP Section 13.5 by so notifying the CAISO within two (2) Business Days of the notice of invalidity.

### **3.6 Internet Posting.**

The CAISO will maintain on the CAISO Website a list of all Interconnection Requests. The list will identify, for each Interconnection Request: (i) the maximum summer and winter megawatt electrical output; (ii) the location by county and state; (iii) the station or transmission line or lines where the interconnection will be made; (iv) the most recent projected Commercial Operation Date; (v) the status of the Interconnection Request, including whether it is active or withdrawn; (vi) the availability of any studies related to the Interconnection Request; (vii) the date of the Interconnection Request; (viii) the type of Generating Facility to be constructed (e.g., combined cycle, combustion turbine, wind turbine, and fuel type); and (ix) requested deliverability status.

Except in the case of an Affiliate, the list will not disclose the identity of the Interconnection Customer until the Interconnection Customer executes an LGIA or requests that the applicable Participating TO(s) and the CAISO file an unexecuted LGIA with FERC. The CAISO shall post on the CAISO Website an advance notice whenever a Scoping Meeting will be held with an Affiliate of a Participating TO.

The CAISO shall post to the CAISO Website any deviations from the study timelines set forth herein. The CAISO shall further post to the CAISO Website non-confidential portions of the Phase I Interconnection Study following the final Results Meeting and non-confidential portions of the Phase II Interconnection Study no later than publication of the final Transmission Plan under CAISO Tariff Section 24.2.5.2.

### **3.7 Coordination with Affected Systems.**

The CAISO will notify the Affected System Operators that are potentially affected by the Interconnection Customer's Interconnection Request or Group Study within which the Interconnection Customer's Interconnection Request will be studied. The CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System Operators, to the extent possible, and, if possible, the CAISO will include those results (if available) in its applicable Interconnection Study within the time frame specified in this LGIP. The CAISO will include such Affected System Operators in all meetings held with the Interconnection Customer as required by this LGIP. The Interconnection Customer will cooperate with the CAISO in all matters related to the conduct of studies and the determination of modifications to Affected Systems, including signing separate study agreements with Affected System owners and paying for necessary studies. An entity which may be an Affected System shall cooperate with the CAISO in all matters related to the conduct of studies and the determination of modifications to Affected Systems.

### **3.8 Withdrawal.**

The Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to the CAISO, and the CAISO will notify the applicable Participating TO(s) and Affected System Operators, if any, within three (3) Business Days of receipt of such a notice. In addition, after confirmation by the CAISO of a valid Interconnection Request under LGIP Section 3.5.2, if the Interconnection Customer fails to adhere to all requirements of this LGIP, except as provided in LGIP Section 13.5 (Disputes), the CAISO shall deem the Interconnection Request to be withdrawn and shall provide written notice to the Interconnection Customer within five (5) Business Days of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Upon receipt of such written notice, the Interconnection Customer shall have five (5) Business Days in which to respond with information or action that either cures the deficiency or supports its position that the deemed withdrawal was erroneous and notifies the CAISO of its intent to pursue Dispute Resolution.

Withdrawal shall result in the removal of the Interconnection Request from the Interconnection Study Cycle. If an Interconnection Customer disputes the withdrawal and removal from the Interconnection Study Cycle and has elected to pursue Dispute Resolution, the Interconnection Customer's Interconnection Request will not be considered in any ongoing Interconnection Study during the Dispute Resolution process.

In the event of such withdrawal, the CAISO, subject to the provisions of LGIP Sections 13.1 and 3.5.1.2, shall provide, at the Interconnection Customer's request, all information that the CAISO developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.

### **3.9 Transferability of Interconnection Request.**

An Interconnection Customer may transfer its Interconnection Request to another entity only if such entity acquires the specific Generating Facility identified in the Interconnection Request and the Point of Interconnection does not change.

### **Section 4 Large Generator Interconnection Study Process Agreement.**

Within thirty (30) calendar days of the close of the Queue Cluster Window, the CAISO shall provide to each Interconnection Customer with a valid Interconnection Request received during the Queue Cluster Window a *pro forma* Large Generator Interconnection Study Process Agreement in the form set forth in Appendix 3 of this LGIP. The *pro forma* Large Generator Interconnection Study Process Agreement shall specify that the Interconnection Customer is responsible for the actual cost of the Interconnection Studies, including reasonable administrative costs, and all requirements of this LGIP. Within three (3) Business Days following the Scoping Meeting, the Interconnection Customer shall specify for inclusion in the attachment to the Large Generator Interconnection Study Process Agreement the Point of Interconnection for the Phase I Interconnection Study. Within ten (10) Business Days following the CAISO's receipt of such designation, the CAISO, in coordination with the applicable Participating TOs, shall provide to the Interconnection Customer a signed Large Generator Interconnection Study Process Agreement. The Interconnection Customer shall execute and deliver to the CAISO the Large Generator Interconnection Study Process Agreement no later than thirty (30) calendar days after the Scoping Meeting.

### **Section 5 Scoping Meeting.**

Within five (5) Business Days after the CAISO notifies the Interconnection Customer of a valid Interconnection Request, the CAISO shall establish a date agreeable to the Interconnection Customer and the applicable Participating TO(s) for the Scoping Meeting. All Scoping Meetings shall occur no later than sixty (60) calendar days after the close of the Queue Cluster Window, unless otherwise mutually agreed upon by the Parties. The CAISO shall determine whether the Interconnection Request is at or near the boundary of an affected Participating TO(s) service territory or of any other Affected System(s) so as to potentially affect such third parties. If such a determination is made, the CAISO shall invite the affected Participating TO(s), and/or Affected System Operator(s) in accordance with LGIP Section 3.7, to the Scoping Meeting by informing such third parties of the time and place of the scheduled Scoping Meeting as soon as practicable.

The purpose of the Scoping Meeting shall be to discuss reasonable Commercial Operation Dates and alternative interconnection options, to exchange information including any transmission data that would reasonably be expected to impact such interconnection options, to analyze such information and to determine the potential feasible Points of Interconnection and eliminate alternatives given resources and available information. The applicable Participating TO(s) and the CAISO will bring to the meeting, as reasonably necessary to accomplish its purpose, the following: (a) such already available technical data, including, but not limited to, (i) general facility loadings, (ii) general instability issues, (iii) general short circuit issues, (iv) general voltage issues, and (v) general reliability issues, and (b) general information regarding the number, location, and capacity of other Interconnection Requests in the Interconnection Study Cycle that may potentially form a Group Study with the Interconnection Customer's Interconnection Request.

The Interconnection Customer will bring to the Scoping Meeting, in addition to the technical data in Attachment A to LGIP Appendix 1, any system studies previously performed. The applicable Participating TO(s), the CAISO and the Interconnection

Customer will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. On the basis of the meeting, the Interconnection Customer shall designate its Point of Interconnection. The duration of the meeting shall be sufficient to accomplish its purpose.

The CAISO shall prepare minutes from the meeting, verified by the Interconnection Customer and the other attendees, that will include, at a minimum, discussions among the applicable Participating TO(s) and the CAISO of the expected results and a good faith estimate of the costs for the Phase I Interconnection Study.

## **Section 6 Interconnection Studies.**

### **6.1 Grouping Interconnection Requests.**

At the CAISO's option, and in coordination with the applicable Participating TO(s), an Interconnection Request received during a particular Queue Cluster Window may be studied individually or in a Group Study for the purpose of conducting one or more of the analyses forming the Interconnection Studies. For each Interconnection Study within an Interconnection Study Cycle, the CAISO may develop one or more Group Studies. A Group Study will include, at the CAISO's sole judgment after coordination with the applicable Participating TO(s), Interconnection Requests that electrically affect one another with respect to the analysis being performed without regard to the nature of the underlying Interconnection Service. The CAISO may also, in its sole judgment after coordination with the applicable Participating TO(s), conduct an Interconnection Study for an Interconnection Request separately to the extent warranted by Good Utility Practice based upon the electrical remoteness of the proposed Large Generating Facility from other Large Generating Facilities with Interconnection Requests in the same Queue Cluster Window.

An Interconnection Request's inclusion in a Group Study will not relieve the CAISO or Participating TO(s) from meeting the timelines for conducting the Phase I Interconnection Study provided in the LGIP. Group Studies shall be conducted in such a manner to ensure the efficient implementation of the applicable regional transmission expansion plan in light of the transmission system's capabilities at the time of each study.

### **6.2 Scope and Purpose of Phase I Interconnection Study.**

The Phase I Interconnection Study shall (i) evaluate the impact of all Interconnection Requests received during the Queue Cluster Window on the CAISO Controlled Grid, (ii) preliminarily identify all Network Upgrades needed to address the impacts on the CAISO Controlled Grid of the Interconnection Requests, (iii) preliminarily identify for each Interconnection Request required Interconnection Facilities, (iv) assess the Point of Interconnection selected by each Interconnection Customer and potential alternatives to evaluate potential efficiencies in overall transmission upgrades costs, (v) establish the maximum cost responsibility for Network Upgrades assigned to each Interconnection Request in accordance with LGIP Section 6.3, and (vi) provide a good faith estimate of the cost of Interconnection Facilities for each Interconnection Request.

The Phase I Interconnection Study will consist of a short circuit analysis, a stability analysis to the extent the CAISO and applicable Participating TO(s) reasonably expect transient or voltage stability concerns, a power flow analysis, including off-peak analysis, and an On-Peak and Off-Peak Deliverability Assessment(s), as applicable, in accordance with LGIP Section 6.3.2. The Phase I Interconnection Study will state for each Group Study or Interconnection Request studied individually (i) the assumptions upon which it is based, (ii) the results of the analyses, and (iii) the requirements or potential impediments

to providing the requested Interconnection Service to all Interconnection Requests in a Group Study or to the Interconnection Request studied individually. The Phase I Interconnection Study will provide, without regard to the requested Commercial Operation Dates of the Interconnection Requests, a list of Network Upgrades to the CAISO Controlled Grid that are preliminarily identified as required as a result of the Interconnection Requests in a Group Study or as a result of any Interconnection Request studied individually and Participating TO's Interconnection Facilities associated with each Interconnection Request, and an estimate of any other financial impacts (i.e., on Local Furnishing Bonds).

### **6.3 Identification and Cost Allocation Methods for Network Upgrades in Phase I Interconnection Study.**

#### **6.3.1 Reliability Network Upgrades.**

The CAISO, in coordination with the applicable Participating TO(s), will perform short circuit and stability analyses for each Interconnection Request either individually or as part of a Group Study to preliminarily identify the Reliability Network Upgrades needed to interconnect the Large Generating Facilities to the CAISO Controlled Grid. The CAISO, in coordination with the applicable Participating TO(s), shall also perform power flow analyses, under a variety of system conditions, for each Interconnection Request either individually or as part of a Group Study to identify Reliability Criteria violations, including applicable thermal overloads, that must be mitigated by Reliability Network Upgrades.

The cost of all Reliability Network Upgrades identified in the Phase I Interconnection Study shall be estimated in accordance with LGIP Section 6.4. The estimated costs of Reliability Network Upgrades identified as a result of an Interconnection Request studied separately shall be assigned solely to that Interconnection Request. The estimated costs of Reliability Network Upgrades identified through a Group Study shall be assigned to all Interconnection Requests in that Group Study pro rata on the basis of the maximum megawatt electrical output of each proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed by the Interconnection Customer in its Interconnection Request.

#### **6.3.2 Delivery Network Upgrades.**

##### **6.3.2.1 The On-Peak Deliverability Assessment.**

The CAISO, in coordination with the applicable Participating TO(s), shall perform an On-Peak Deliverability Assessment for Interconnection Customers selecting Full Capacity Deliverability Status in their Interconnection Requests. The On-Peak Deliverability Assessment shall determine the Interconnection Customer's Large Generating Facility's ability to deliver its Energy to the CAISO Controlled Grid under peak load conditions, and identify preliminary Delivery Network Upgrades required to provide the Large Generating Facility with Full Capacity Deliverability Status. The preliminary Delivery Network Upgrades identified by the On-Peak Deliverability Assessment will be used to establish the maximum cost responsibility for Delivery Network Upgrades for each Interconnection Customer selecting Full Capacity Deliverability Status. Deliverability of a new Large Generating Facility will be assessed on the same basis as all other existing resources interconnected to the CAISO Controlled Grid.

The On-Peak Deliverability Assessment will identify the Network Upgrades that are required to enable the Large Generating Facility of each Interconnection Customer requesting Full Capacity Deliverability Status to meet the requirements for deliverability. Deliverability requires that the Generating Facility Capacity, as set forth in the Interconnection Request, can be delivered to the aggregate of Load on the CAISO



Controlled Grid, consistent with Reliability Criteria, under CAISO Controlled Grid peak load and Contingency conditions, and assuming the aggregate output of existing Generating Facilities with established Net Qualifying Capacity values and other Large Generating Facilities in the Interconnection Study Cycle seeking Full Capacity Deliverability Status identified within the On-Peak Deliverability Assessment based on the effect of transmission Constraints.

The On-Peak Deliverability Assessment will further perform an analysis to estimate the MW of deliverable generation capacity for the individual or Group Study if the highest cost Delivery Network Upgrade component were removed from the preliminary Delivery Network Upgrade plan, or, at the CAISO's sole discretion, if any other identified Delivery Network Upgrade component(s) were removed from the preliminary Delivery Network Upgrade plan. This information is provided to allow Interconnection Customers to address at the Results Meeting potential modifications under LGIP Section 6.7.2 or change the Interconnection Request's Full Capacity Deliverability Status for purposes of financing under LGIP Section 12.3.1.

The methodology for the On-Peak Deliverability Assessment will be published on the CAISO Website or, when effective, included in a CAISO Business Practice Manual. The On-Peak Deliverability Assessment does not convey any right to deliver electricity to any specific customer or Delivery Point.

The cost of all Delivery Network Upgrades identified in the On-Peak Deliverability Assessment as part of a Phase I Interconnection Study shall be estimated in accordance with LGIP Section 6.4. The estimated costs of Delivery Network Upgrades identified in the On-Peak Deliverability Assessment shall be assigned to all Interconnection Requests selecting Full Capacity Deliverability Status based on the flow impact of each such Large Generating Facility on the Delivery Network Upgrades as determined by the Generation distribution factor methodology set forth in the On-Peak Deliverability Assessment methodology.

#### **6.3.2.2 Off-Peak Deliverability Assessment.**

The CAISO, in coordination with the applicable Participating TO(s), shall perform an Off-Peak Deliverability Assessment for Interconnection Customers selecting Full Capacity Deliverability Status in their Interconnection Requests to determine Delivery Network Upgrades in addition to those identified in the On-Peak Deliverability Assessment, if any, for a Group Study or individual Phase I Interconnection Study that includes one or more Location Constrained Resource Interconnection Generators (LCRIG), where the fuel source or source of energy for the LCRIG substantially occurs during off-peak conditions. Delivery Network Upgrades will be identified under this Section to ensure that the full maximum megawatt electrical output of each proposed new LCRIG or the amount of megawatt increase in the generating capacity of each existing LCRIG as listed by the Interconnection Customer in its Interconnection Request, whether studied individually or as a Group Study, is deliverable to the aggregate of Load on the CAISO Controlled Grid under the Generation dispatch conditions studied. The methodology for the Off-Peak Deliverability Assessment will be published on the CAISO Website or, if applicable, included in a CAISO Business Practice Manual.

At the CAISO's discretion, an additional Off-Peak Deliverability Assessment may be performed to estimate the MW of deliverable generation capacity from the LCRIG studied individually or from the Group Study if the highest cost, or any other, Delivery Network Upgrade component were removed from the preliminary Delivery Network Upgrade plan. This information is provided to allow Interconnection Customers to address at the Results Meeting potential modifications under LGIP Section 6.7.2 or change the Interconnection

Request's Full Capacity Deliverability Status for purposes of financing under LGIP Section 12.3.1.

The cost of all Delivery Network Upgrades identified in the Off-Peak Deliverability Assessment as part of Phase I Interconnection Study shall be estimated in accordance with LGIP Section 6.4. The estimated costs of Delivery Network Upgrades identified in the Off-Peak Deliverability Assessment shall be assigned to each Interconnection Request included in the Group Study or studied individually based on the flow impact of each such LCRIG on the Delivery Network Upgrades as determined by the Generation distribution factor methodology set forth in the Off-Peak Deliverability Assessment methodology.

#### **6.4 Use of Per Unit Costs to Estimate Network Upgrade Costs.**

Prior to the commencement of the initial Queue Cluster Window for each calendar year, each Participating TO, under the direction of the CAISO, shall publish per unit costs for facilities generally required to interconnect Generation to their respective systems. These per unit costs shall reflect the anticipated cost of procuring and installing such facilities during the current Interconnection Study Cycle, and may vary among Participating TOs and within a Participating TO Service Territory based on geographic and other cost input differences, and should include an annual adjustment for the following ten (10) years to account for the anticipated timing of procurement to accommodate a potential range of Commercial Operation Dates of Interconnection Requests in the Interconnection Study Cycle. The per unit costs will be used to develop the cost of Reliability Network Upgrades, Delivery Network Upgrades and Participating TO's Interconnection Facilities under this LGIP Section 6.

Prior to adoption and publication of final per unit costs for use in the Interconnection Study Cycle, the CAISO shall publish to the CAISO Website draft per unit costs, including non-confidential information regarding the bases therefore, hold a stakeholder meeting to address the draft per unit costs, and permit stakeholders to provide comments on the draft per unit costs.

#### **6.5 Phase I Interconnection Study Costs Form the Basis of Interconnection Financial Security.**

The costs assigned to Interconnection Customers for Network Upgrades under this Section 6 of the LGIP shall establish the maximum value for the Interconnection Financial Security required from each Interconnection Customer under LGIP Section 9 for such Network Upgrades. In contrast, the costs assigned to Interconnection Customers for Participating TO's Interconnection Facilities under this Section 6 of the LGIP are estimates only that establish the basis for the initial Interconnection Financial Security required from each Interconnection Customer under LGIP Section 9.2.

#### **6.6 Phase I Interconnection Study Procedures.**

The CAISO shall coordinate the Phase I Interconnection Study with applicable Participating TO(s) pursuant to LGIP Section 3.2 and any Affected System that is affected by the Interconnection Request pursuant to LGIP Section 3.7. Existing studies shall be used to the extent practicable when conducting the Phase I Interconnection Study. The CAISO will coordinate Base Case development with the applicable Participating TOs to ensure the Base Cases are accurately developed. The CAISO shall use Reasonable Efforts to complete and publish to Interconnection Customers the Phase I Interconnection Study report at a maximum within two hundred seventy (270) calendar days after the close of the Queue Cluster Window and approximately one hundred eighty calendar days after the final Scoping Meeting held for the Interconnection Study Cycle; however, each individual study or Group Studies may be completed prior to this

maximum time where practicable based on factors, including, but not limited to, the number of Interconnection Requests in the Queue Cluster Window, study complexity, and reasonable availability of subcontractors as provided under LGIP Section 13.2. The CAISO will share applicable study results with the applicable Participating TO(s) for review and comment and will incorporate comments into the study report. The CAISO will issue a final Phase I Interconnection Study report to the Interconnection Customer. At the time of completion of the Phase I Interconnection Study, the CAISO may, at the Interconnection Customer's request, determine whether the provisions of LGIP Section 7.6 apply.

At any time the CAISO determines that it will not meet the required time frame for completing the Phase I Interconnection Study due to the large number of Interconnection Requests in the Queue Cluster Window, study complexity, or unavailability of subcontractors on a reasonable basis to perform the study in the required time frame, the CAISO shall notify the Interconnection Customers as to the schedule status of the Phase I Interconnection Study and provide an estimated completion date with an explanation of the reasons why additional time is required.

Upon request, the CAISO shall provide the Interconnection Customer all supporting documentation, workpapers and relevant pre-Interconnection Request and post-Interconnection Request power flow, short circuit and stability databases for the Phase I Interconnection Study, subject to confidentiality arrangements consistent with LGIP Section 13.1.

## **6.7 Phase I Interconnection Study Results Meeting.**

Within thirty (30) calendar days of providing the Phase I Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s), the CAISO and the Interconnection Customer shall hold a Results Meeting to discuss the results of the Phase I Interconnection Study, including assigned cost responsibility.

### **6.7.1 Commercial Operation Date.**

At the Results Meeting, the Interconnection Customer shall provide a schedule outlining key milestones including environmental survey start date, expected environmental permitting submittal date, expected procurement date of project equipment, back-feed date for project construction, and expected project construction date. This will assist the parties in determining if Commercial Operation Dates are reasonable. If major Interconnection Customer's Interconnection Facilities for the Large Generating Facility have been identified in the Phase I Interconnection Study, such as telecommunications equipment to support a possible Special Protection System (SPS), distribution feeders to support back feed, new substation, and/or expanded substation work, permitting and material procurement lead times may result in the need to alter the proposed Commercial Operation Date. The Parties may agree to a new Commercial Operation Date. In addition, where an Interconnection Customer intends to establish Commercial Operation separately for different Electric Generating Units or project phases at its Generating Facility, it may only do so in accordance with an implementation plan agreed to in advance by the CAISO and Participating TO, which agreement shall not be unreasonably withheld. Where the parties cannot agree, the Commercial Operation Date determined reasonable by the CAISO, in coordination with the applicable Participating TO(s), will be used for the Phase II Interconnection Study where the changed Commercial Operation Date is needed to accommodate the anticipated completion, assuming Reasonable Efforts by the applicable Participating TO(s), of necessary Reliability Network Upgrades and/or Participating TO's Interconnection Facilities, pending the outcome of any relief sought by the Interconnection Customer under LGIP Section 13.5. The Interconnection

Customer must notify the CAISO within five (5) Business Days following the Results Meeting that it is initiating dispute procedures under LGIP Section 13.5.

## **6.7.2 Modifications.**

At the Results Meeting, the Interconnection Customer should be prepared to discuss any desired modifications to the Interconnection Request. Within five (5) Business Days following the Results Meeting, the Interconnection Customer shall submit to the CAISO, in writing, modifications to any information provided in the Interconnection Request. The CAISO will forward the Interconnection Customer's modification to the applicable Participating TO(s) within one (1) Business Day of receipt. The Interconnection Customer shall remain eligible for the Phase II Interconnection Study if the modifications are in accordance with LGIP Sections 6.7.2.1 or 6.7.2.2.

Notwithstanding the above, during the course of the Interconnection Studies, the Interconnection Customer, the applicable Participating TO(s), or the CAISO may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes are acceptable to the applicable Participating TO(s), the CAISO, and Interconnection Customer, such acceptance not to be unreasonably withheld, the CAISO shall modify the Point of Interconnection and/or configuration in accordance with such changes without altering the Interconnection Request's eligibility for participating in Interconnection Studies.

**6.7.2.1** Modifications permitted under this Section 6.7.2 shall include specifically: (a) a decrease in the electrical output (MW) of the proposed project; (b) modifying the technical parameters associated with the Large Generating Facility technology or the Large Generating Facility step-up transformer impedance characteristics; and (c) modifying the interconnection configuration.

**6.7.2.2** For any modification other than those specifically permitted by LGIP Section 6.7.2.1, the Interconnection Customer may first request that the CAISO evaluate whether such modification is a Material Modification. In response to the Interconnection Customer's request, the CAISO, in coordination with the affected Participating TO(s) and, if applicable, any Affected System Operator, shall evaluate the proposed modifications prior to making them and the CAISO shall inform the Interconnection Customer in writing of whether the modifications would constitute a Material Modification. Any change to the Point of Interconnection, except for that specified by the CAISO in an Interconnection Study or otherwise allowed under this LGIP Section 6.7.2, shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

## **Section 7 Phase II Interconnection Study.**

### **7.1 Scope of Phase II Interconnection Study.**

The CAISO, in coordination with the applicable Participating TO(s), will conduct a Phase II Interconnection Study that will incorporate eligible Interconnection Requests from the previous two Phase I Interconnection Studies. The Phase II Interconnection Study shall (i) update, as necessary, analyses performed in the Phase I Interconnection Studies to account for the withdrawal of Interconnection Requests, (ii) identify final Reliability Network Upgrades needed to physically interconnect the Large Generating Facilities, (iii) assign responsibility for financing the identified final Reliability Network Upgrades, (iv) identify, following coordination with the CAISO's Transmission Planning Process, final Delivery Network Upgrades needed to interconnect those Large Generating Facilities

selecting Full Capacity Deliverability Status, (v) assign responsibility for financing Delivery Network Upgrades needed to interconnect those Large Generating Facilities selecting Full Capacity Deliverability Status, (vi) identify for each Interconnection Request final Point of Interconnection and Participating TO's Interconnection Facilities and Interconnection Customer's Interconnection Facilities, (vii) provide a +/-20% estimate for each Interconnection Request of the final Participating TO's Interconnection Facilities and Interconnection Customer's Interconnection Facilities, and (viii) optimize in-service timing requirements based on operational studies in order to maximize achievement of the Commercial Operation Dates of the Large Generating Facilities.

With respect to the foregoing items, the Phase II Interconnection Study shall specify and estimate the cost of the equipment, engineering, procurement and construction work, including the financial impacts (i.e., on Local Furnishing Bonds), if any, and schedule for effecting remedial measures that address such financial impacts, needed on the CAISO Controlled Grid to implement the conclusions of the updated Phase II Interconnection Study technical analyses in accordance with Good Utility Practice to physically and electrically connect the Interconnection Customer's Interconnection Facilities to the CAISO Controlled Grid. The Phase II Interconnection Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Participating TO's Interconnection Facilities and Network Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities.

## **7.2 Coordination of the Phase II Interconnection Study with the Transmission Planning Process.**

The CAISO shall coordinate the Phase II Interconnection Studies with the CAISO's Transmission Planning Process under CAISO Tariff Section 24. This coordination shall include, but not be limited to:

- (i) consistency, to the maximum extent applicable under Good Utility Practice, between the Interconnection Base Case Data used for performance of the Phase II Interconnection Studies and the Unified Planning Assumptions developed for the Transmission Planning Process, including, but not limited to, data relating to Demand data, network topology, and generation resources;
- (ii) consideration of any conceptual transmission plan(s) developed, but not rejected, in the current or former Transmission Planning Processes intended to access generation development areas as a means to satisfy the Network Upgrade requirements to interconnect Generating Facilities included in the Phase II Interconnection Study;
- (iii) performance of sensitivities within the Transmission Planning Process, including cases considering Generating Facilities included in the Phase II Interconnection Study(ies) to the extent possible, to optimize transmission upgrades developed in the current Transmission Planning Process to achieve System Reliability, economic efficiency, and satisfy the Network Upgrade requirements to interconnect Generating Facilities included in the Phase II Interconnection Study;
- (iv) consideration of future generation development potential in transmission upgrade designs pursuant to criteria developed as part of the Unified Planning Assumptions; and
- (v) consideration of phased development and option value of transmission projects to address uncertainty.

Network Upgrades, apart from detail engineering and final cost determinations, identified in any Phase II Interconnection Study or as part of the Transmission Planning Process that must receive CAISO Governing Board approval under Section 24 of the CAISO Tariff may be subject to Section 24.2.5.2 of the CAISO Tariff.

Generation projects entering the Phase II Interconnection Study will also be considered in the Unified Planning Assumptions, as appropriate. Transmission projects proposed through the Phase II Interconnection Study that require CAISO Governing Board approval will be integrated into the stakeholder process under the Transmission Planning Process.

### **7.3 Financing of Reliability Network Upgrades.**

The responsibility to finance final Reliability Network Upgrades identified in the Phase II Interconnection Study of an Interconnection Request studied separately shall be assigned solely to that Interconnection Request up to the cost assignment for Reliability Network Upgrades under LGIP Section 6.3.1. The responsibility to finance final Reliability Network Upgrades identified through a Group Study in the Phase II Interconnection Study shall be assigned to all Interconnection Requests in that Group Study pro rata on the basis of the maximum megawatt electrical output of each proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed by the Interconnection Customer in its Interconnection Request up to the cost assignment for Reliability Network Upgrades under LGIP Section 6.3.1.

### **7.4 Financing of Delivery Network Upgrades.**

The responsibility to finance all Delivery Network Upgrades identified in the On-Peak Deliverability Assessment and Off-Peak Deliverability Assessment as part of Phase II Interconnection Study shall be assigned to all Interconnection Requests selecting Full Capacity Deliverability Status based on the flow impact of each such Large Generating Facility on each Delivery Network Upgrade as determined by the Generation distribution factor methodology set forth in the On-Peak and Off-Peak Deliverability Assessment methodologies. The financing responsibility shall be up to, but no greater than, the cost assignment for Delivery Network Upgrades for each Interconnection Request under LGIP Sections 6.3.2.1 and 6.3.2.2.

### **7.5 Phase II Interconnection Study Procedures.**

The CAISO shall coordinate the Phase II Interconnection Study with applicable Participating TO(s) and any Affected System that is affected by the Interconnection Request pursuant to LGIP Section 3.7. Existing studies shall be used to the extent practicable when conducting the Phase II Interconnection Study. The CAISO will coordinate Base Case development with the applicable Participating TOs to ensure the Base Cases are accurately developed. The CAISO shall use Reasonable Efforts to complete and publish to Interconnection Customers the Phase II Interconnection Study report within three hundred thirty (330) calendar days from January 1 of each calendar year. The CAISO will share applicable study results with the applicable Participating TO(s), for review and comment, and will incorporate comments into the study report. The CAISO will issue a final Phase II Interconnection Study report to the Interconnection Customer.

At the request of the Interconnection Customer or at any time the CAISO determines that it will not meet the required time frame for completing the Phase II Interconnection Study, the CAISO shall notify the Interconnection Customer as to the schedule status of the

Phase II Interconnection Study and provide an estimated completion date with an explanation of the reasons why additional time is required.

Upon request, the CAISO shall provide the Interconnection Customer all supporting documentation, workpapers and relevant pre-Interconnection Request and post-Interconnection Request power flow, short circuit and stability databases for the Phase II Interconnection Study, subject to confidentiality arrangements consistent with LGIP Section 13.1.

#### **7.6. Accelerated Phase II Interconnection Study Process.**

The Phase II Interconnection Study shall be completed within one hundred fifty (150) calendar days following the posting of the initial Interconnection Financial Security under LGIP Section 9 where the Interconnection Request meets the following criteria: (i) the Interconnection Request was not grouped with any other Interconnection Requests during the Phase I Interconnection Study or was identified as interconnecting to a point of available transmission during the Phase I Interconnection Study, and (ii) the Interconnection Customer is able to demonstrate that the general Phase II Interconnection Study timeline under LGIP Section 7.5 is not sufficient to accommodate the Commercial Operation Date of the Large Generating Facility.

In addition to the above criteria, the CAISO may apply to FERC in coordination with the Interconnection Customer for a waiver of the timelines in this LGIP to meet the schedule required by an order, ruling, or regulation of the Governor of the State of California, the CPUC, or the CEC.

#### **7.7 Meeting with the CAISO and Applicable Participating TO(s).**

Within thirty (30) calendar days of providing the final Phase II Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s), the CAISO and the Interconnection Customer shall meet to discuss the results of the Phase II Interconnection Study, including selection of the final Commercial Operation Date.

#### **Section 8 [NOT USED]**

#### **Section 9 Interconnection Financial Security.**

##### **9.1 Types of Interconnection Financial Security.**

The Interconnection Financial Security posted by an Interconnection Customer may be any combination of the following types of Interconnection Financial Security provided in favor of the applicable Participating TO(s):

- (a) an irrevocable and unconditional letter of credit issued by a bank or financial institution that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's;
- (b) an irrevocable and unconditional surety bond issued by an insurance company that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's;
- (c) an unconditional and irrevocable guaranty issued by a company has a credit rating of A or better by Standard and Poors or A2 or better by Moody's;

- (d) a cash deposit standing to the credit of the CAISO and applicable Participating TO(s) in an interest-bearing escrow account maintained at a bank or financial institution that is reasonably acceptable to the CAISO;
- (e) a certificate of deposit in the name of the CAISO issued by a bank or financial institution that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's; or
- (f) a payment bond certificate in the name of the CAISO issued by a bank or financial institution that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's.

Interconnection Financial Security instruments as listed above shall be in such form as the CAISO and applicable Participating TO(s) may reasonably require from time to time by notice to Interconnection Customers or in such other form as has been evaluated and approved as reasonably acceptable by the CAISO and applicable Participating TO(s). The CAISO shall publish and maintain standardized forms related to the types of Interconnection Financial Security listed above on the CAISO Website. The CAISO shall require the use of standardized forms of Interconnection Financial Security to the greatest extent possible. If at any time the guarantor of the Interconnection Financial Security fails to maintain the credit rating required by this LGIP Section 9.1, the Interconnection Customer shall provide to the CAISO replacement Interconnection Financial Security meeting the requirements of this LGIP Section 9.1 within five (5) Business Days of the change in credit rating.

Interest on a cash deposit standing to the credit of the CAISO in an interest-bearing escrow account under subpart (d) of this LGIP Section 9.1 will accrue to the Interconnection Customer's benefit and will be added to the Interconnection Customer's account on a monthly basis.

## **9.2 Initial Posting of Interconnection Financial Security.**

On or before ninety (90) calendar days after publication of the final Phase I Interconnection Study report, Interconnection Customers must post, with notice to the CAISO, two separate Interconnection Financial Security instruments (i) in the amount of twenty percent (20%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study for Network Upgrades, or \$500,000, whichever is greater, and (ii) in the amount of twenty percent (20%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study for Participating TO's Interconnection Facilities. The failure by an Interconnection Customer to timely post, and notify the CAISO of the posting of, the Interconnection Financial Security required by this LGIP Section 9.2 shall result in the Interconnection Request being deemed withdrawn and subject to LGIP Section 3.8.

## **9.3 Second Posting of Interconnection Financial Security.**

On or before one hundred eighty (180) calendar days after publication of the final Phase II Interconnection Study report or at the start of Construction Activities of Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer, whichever is earlier, the Interconnection Customer must post separate Interconnection Financial Security instruments in the total amount of one hundred percent (100%) of the total cost responsibility assigned to the Interconnection Customer (i) in the final Phase I Interconnection Study for Network Upgrades, if greater than \$500,000, and (ii) in the final Phase II Interconnection Study for Participating TO's Interconnection Facilities. The start date for Construction Activities of Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer must be set



forth in the Interconnection Customer's LGIA if that start date is prior to one hundred eighty (180) calendar days after publication of the final Phase II Interconnection Study report. The failure by an Interconnection Customer to timely post the Interconnection Financial Security required by this LGIP Section 9.2 shall constitute grounds for termination of the LGIA pursuant to LGIA Article 2.3.

#### **9.4 General Effect of Withdrawal of Interconnection Request or Termination of the LGIA on Interconnection Financial Security.**

Except as set forth in LGIP Section 9.4.1, withdrawal of an Interconnection Request or termination of an LGIA shall allow the applicable Participating TO(s) to liquidate the Interconnection Financial Security, or balance thereof, posted by the Interconnection Customer for Network Upgrades at the time of withdrawal. To the extent the amount of the liquidated Interconnection Financial Security plus capital, if any, separately provided by the Interconnection Customer to satisfy its obligation to finance Network Upgrades in accordance with LGIP Section 12.3 exceeds the total cost responsibility for Network Upgrades assigned to the Interconnection Customer by the Phase I Interconnection Study, the applicable Participating TO(s) shall remit to the Interconnection Customer the excess amount.

Withdrawal of an Interconnection Request or termination of an LGIA shall result in the release to the Interconnection Customer of any Interconnection Financial Security posted by the Interconnection Customer for Participating TO's Interconnection Facilities, except with respect to any amounts necessary to pay for costs incurred or irrevocably committed by the applicable Participating TO(s) on behalf of the Interconnection Customer for the Participating TO's Interconnection Facilities and for which the applicable Participating TO(s) has not been reimbursed.

#### **9.4.1 Conditions for Partial Recovery of Interconnection Financial Security Upon Withdrawal of Interconnection Request or Termination of LGIA.**

A portion of the Interconnection Financial Security shall be released to the Interconnection Customer, consistent with LGIP Section 9.4.2, if the withdrawal of the Interconnection Request or termination of the LGIA occurs for any of the following reasons:

- (a) **Failure to Secure a Power Purchase Agreement.** At the time of withdrawal of the Interconnection Request or termination of the LGIA, the Interconnection Customer demonstrates to the CAISO that it has failed to secure an acceptable power purchase agreement for the Energy or capacity of the Large Generating Facility after a good faith effort to do so. A good faith effort can be established by demonstrating participation in a competitive solicitation process or bilateral negotiations with an entity other than an Affiliate that progressed, at minimum, to the mutual exchange by all counter-parties of proposed term sheets.
- (b) **Failure to Secure a Necessary Permit.** At the time of withdrawal of the Interconnection Request or termination of the LGIA, the Interconnection Customer demonstrates to the CAISO that it has received a final denial from the primary issuing Governmental Authority of any permit or other authorization necessary for the construction or operation of the Large Generating Facility.
- (c) **Increase in the Cost of Participating TO's Interconnection Facilities.** The Interconnection Customer withdraws the Interconnection Request or terminates the LGIA based on an increase of more than 30% or \$300,000, whichever is greater, in the estimated cost of Participating TO's Interconnection Facilities

between the Phase I Interconnection Study and the Phase II Interconnection Study.

- (d) **Material Change in Interconnection Customer Interconnection Facilities Created by a CAISO Change in the Point of Interconnection.** The Interconnection Customer withdraws the Interconnection Request or terminates the LGIA based on a material change from the Phase I Interconnection Study in the Point of Interconnection for the Large Generating Facility mandated by the CAISO and included in the final Phase II Interconnection Study. A material change in the Point of Interconnection shall be where Point of Interconnection has moved to (i) a different substation, (ii) a different line on a different right of way, or (iii) a materially different location than previously identified on the same line.

#### **9.4.2 Schedule for Determining Non-Refundable Portion of the Interconnection Financial Security for Network Upgrades.**

##### **9.4.2.1 Up to One Hundred Eighty Days After Final Phase II Interconnection Study Report.**

If, at any time after the initial posting of the Interconnection Financial Security for Network Upgrades under LGIP Section 9.2 and on or before one hundred eighty (180) calendar days after the date of issuance of the final Phase II Interconnection Study report, the Interconnection Customer withdraws the Interconnection Request or terminates the LGIA, as applicable, in accordance with LGIP Section 9.4.1, the applicable Participating TO(s) shall liquidate the Interconnection Financial Security for Network Upgrades under LGIP Section 9.2 and reimburse the Interconnection Customer in an amount of (i) fifty percent (50%) of the value of the posted Interconnection Financial Security for Network Upgrades, or, (ii) if the Interconnection Financial Security has been drawn down to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer, the lesser of the remaining balance of the Interconnection Financial Security or the amount calculated under (i) above. If the Interconnection Customer has separately provided capital apart from the Interconnection Financial Security to finance Pre-Construction Activities for Network Upgrades, the applicable Participating TO(s) will credit the capital provided as if drawn from the Interconnection Financial Security and apply (ii) above.

##### **9.4.2.2 Between One Hundred Eighty-One Days and Three Hundred Sixty-Five Days After Final Phase II Interconnection Study Report.**

If, at any time between one hundred eighty-one (181) calendar days and three hundred sixty-five (365) calendar days after the date of issuance of the final Phase II Interconnection Study report, the Interconnection Customer withdraws the Interconnection Request or terminates the LGIA, as applicable, in accordance with LGIP Section 9.4.1, the applicable Participating TO(s) shall liquidate the Interconnection Financial Security for Network Upgrades under LGIP Section 9.3 and reimburse the Interconnection Customer in an amount of (i) fifty percent (50%) of the posted value of the Interconnection Financial Security for Network Upgrades, or, (ii) if the Interconnection Financial Security has been drawn down to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer, the lesser of the remaining balance of the Interconnection Financial Security or the amount calculated under (i) above. If the Interconnection Customer has separately provided capital apart from the Interconnection Financial Security to finance Pre-Construction Activities for Network Upgrades, the applicable Participating TO(s) will credit the capital provided as if drawn from the Interconnection Financial Security and apply (ii) above.

**9.4.2.3 Between Three Hundred Sixty-Six Days and Five Hundred Forty-Five Days After Final Phase II Interconnection Study Report.**

If, at any time between three hundred sixty-six (366) calendar days and five hundred forty-five (545) calendar days after the date of issuance of the final Phase II Interconnection Study report, the Interconnection Customer withdraws the Interconnection Request or terminates the LGIA, as applicable, in accordance with LGIP Section 9.4.1, the applicable Participating TO(s) shall liquidate the Interconnection Financial Security for Network Upgrades under LGIP Section 9.3 and reimburse the Interconnection Customer in an amount of (i) twenty percent (20%) of the posted value of the Interconnection Financial Security for Network Upgrades, or, (ii) if the Interconnection Financial Security has been drawn down to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer, the lesser of remaining balance of the Interconnection Financial Security or the amount calculated under (i) above. If the Interconnection Customer has separately provided capital apart from the Interconnection Financial Security to finance Pre-Construction Activities for Network Upgrades, the applicable Participating TO(s) will credit the capital provided as if drawn from the Interconnection Financial Security and apply (ii) above.

**9.4.2.4 Special Treatment Based on Failure to Obtain Necessary Permit or Authorization from Governmental Authority.**

If, at any time after the posting requirement under LGIP Section 9.3, the Interconnection Customer withdraws the Interconnection Request or terminates the LGIA, as applicable, in accordance with LGIP Section 9.4.1(b), and the Delivery Network Upgrades to be financed by the Interconnection Customer under LGIP Section 7.3 are also to be financed by one or more other Interconnection Customers, then LGIP Section 9.4.2.1 shall apply, except that the Interconnection Customer shall not be reimbursed for its share of any actual costs incurred or irrevocably committed by the applicable Participating TO(s) for Construction Activities.

**9.4.2.5 After Commencement of Construction Activities.**

Except as otherwise provided in LGIP Section 9.4.2.4, once Construction Activities on Network Upgrades on behalf of the Interconnection Customer commence, any withdrawal of the Interconnection Request or termination of the LGIA by the Interconnection Customer will be treated in accordance with this LGIP Section 9.4.

**9.4.2.6 Notification to CAISO and Accounting by Applicable Participating TO(s).**

The applicable Participating TO(s) must notify the CAISO within one (1) Business Day of liquidating any Interconnection Financial Security. Within twenty (20) calendar days of any liquidating event, the applicable Participating TO(s) must provide the CAISO and Interconnection Customer with an accounting of the disposition of the proceeds of the liquidated Interconnection Financial Security and remit to the CAISO all proceeds not otherwise reimbursed to the Interconnection Customer or applied to costs incurred or irrevocably committed by the applicable Participating TO(s) on behalf of the Interconnection Customer in accordance with this LGIP Section 9.4. All non-refundable portions of the Interconnection Financial Security remitted to the CAISO in accordance with this LGIP Section 9.4 shall be treated in accordance with CAISO Tariff Section 37.9.4.

**Section 10 Engineering & Procurement (“E&P”) Agreement.**

Prior to executing an LGIA, an Interconnection Customer may, in order to advance the implementation of its interconnection, request and the applicable Participating TO(s) shall

offer the Interconnection Customer, an E&P Agreement that authorizes the applicable Participating TO(s) to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. However, the applicable Participating TO(s) shall not be obligated to offer an E&P Agreement if the Interconnection Customer is in Dispute Resolution as a result of an allegation that the Interconnection Customer has failed to meet any milestones or comply with any prerequisites specified in other parts of the LGIP. The E&P Agreement is an optional procedure. The E&P Agreement shall provide for the Interconnection Customer to pay the cost of all activities authorized by the Interconnection Customer and to make advance payments or provide other satisfactory security for such costs.

The Interconnection Customer shall pay the cost of such authorized activities and any cancellation costs for equipment that is already ordered for its interconnection, which cannot be mitigated as hereafter described, whether or not such items or equipment later become unnecessary. If the Interconnection Customer withdraws its application for interconnection or either Party terminates the E&P Agreement, to the extent the equipment ordered can be canceled under reasonable terms, the Interconnection Customer shall be obligated to pay the associated cancellation costs. To the extent that the equipment cannot be reasonably canceled, the applicable Participating TO(s) may elect: (i) to take title to the equipment, in which event the applicable Participating TO(s) shall refund the Interconnection Customer any amounts paid by Interconnection Customer for such equipment and shall pay the cost of delivery of such equipment, or (ii) to transfer title to and deliver such equipment to the Interconnection Customer, in which event the Interconnection Customer shall pay any unpaid balance and cost of delivery of such equipment.

## **Section 11 Large Generator Interconnection Agreement (LGIA).**

### **11.1 Tender.**

**11.1.1** Within fifteen (15) Business Days after the CAISO provides the final Phase II Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s) and the CAISO shall tender a draft LGIA, together with draft appendices. The draft LGIA shall be in the form of the FERC-approved form of LGIA set forth in CAISO Tariff Appendix Z. The Interconnection Customer shall provide written comments, or notification of no comments, to the draft appendices to the applicable Participating TO(s) and the CAISO within (30) calendar days of receipt.

**11.1.2** Consistent with LGIP Sections 13.3 and 11.1.1, when the transmission system of a Participating TO, in which the Point of Interconnection is not located, is affected, such Participating TO shall tender a separate agreement, in the form of the LGIA, as appropriately modified.

### **11.2 Negotiation.**

Notwithstanding LGIP Section 11.1, at the request of the Interconnection Customer, the applicable Participating TO(s) and CAISO shall begin negotiations with the Interconnection Customer concerning the appendices to the LGIA at any time after the CAISO provides the Interconnection Customer with the final Phase II Interconnection Study report. The applicable Participating TO(s) and CAISO and the Interconnection Customer shall negotiate concerning any disputed provisions of the appendices to the draft LGIA for not more than ninety (90) calendar days after the CAISO provides the Interconnection Customer with the final Phase II Interconnection Study report. If the Interconnection Customer determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the draft LGIA pursuant to LGIP Section 11.1 and request submission of the unexecuted LGIA with FERC or initiate

Dispute Resolution procedures pursuant to LGIP Section 13.5. If the Interconnection Customer requests termination of the negotiations, but, within ninety (90) calendar days after issuance of the final Phase II Interconnection Study report, fails to request either the filing of the unexecuted LGIA or initiate Dispute Resolution, it shall be deemed to have withdrawn its Interconnection Request. Unless otherwise agreed by the Parties, if the Interconnection Customer has not executed and returned the LGIA, requested filing of an unexecuted LGIA, or initiated Dispute Resolution procedures pursuant to LGIP Section 13.5 within ninety (90) calendar days after issuance of the final Phase II Interconnection Study report, it shall be deemed to have withdrawn its Interconnection Request. The applicable Participating TO(s) and CAISO shall provide to the Interconnection Customer a final LGIA within fifteen (15) Business Days after the completion of the negotiation process.

### **11.3 Execution and Filing.**

The Interconnection Customer shall either: (i) execute the appropriate number of originals of the tendered LGIA as specified in the directions provided by the CAISO and return them to the CAISO, as directed, for completion of the execution process; or (ii) request in writing that the applicable Participating TO(s) and CAISO file with FERC an LGIA in unexecuted form. The LGIA shall be considered executed as of the date that all three Parties have signed the LGIA. As soon as practicable, but not later than ten (10) Business Days after receiving either the executed originals of the tendered LGIA (if it does not conform with a FERC-approved standard form of interconnection agreement) or the request to file an unexecuted LGIA, the applicable Participating TO(s) and CAISO shall file the LGIA with FERC, as necessary, together with an explanation of any matters as to which the Interconnection Customer and the applicable Participating TO(s) or CAISO disagree and support for the costs that the applicable Participating TO(s) propose to charge to the Interconnection Customer under the LGIA. An unexecuted LGIA should contain terms and conditions deemed appropriate by the applicable Participating TO(s) and CAISO for the Interconnection Request. If the Parties agree to proceed with design, procurement, and construction of facilities and upgrades under the agreed-upon terms of the unexecuted LGIA, they may proceed pending FERC action.

### **11.4 Commencement of Interconnection Activities.**

If the Interconnection Customer executes the final LGIA, the applicable Participating TO(s), CAISO and the Interconnection Customer shall perform their respective obligations in accordance with the terms of the LGIA, subject to modification by FERC. Upon submission of an unexecuted LGIA, the Interconnection Customer, applicable Participating TO(s) and CAISO may proceed to comply with the unexecuted LGIA, pending FERC action.

### **11.5 Interconnection Customer to Meet Requirements of the Participating TO's Interconnection Handbook.**

The Interconnection Customer's Interconnection Facilities shall be designed, constructed, operated and maintained in accordance with the applicable Participating TO's Interconnection Handbook.

## **Section 12 Construction of Participating TO's Interconnection Facilities and Network Upgrades, and Funding of Network Upgrades.**

### **12.1 Schedule.**

The applicable Participating TO(s) and the Interconnection Customer shall negotiate in good faith concerning a schedule for the construction of the applicable Participating TO's Interconnection Facilities and the Network Upgrades.

## **12.2 Construction Sequencing.**

### **12.2.1 General.**

In general, the sequence of construction of Stand Alone Network Upgrades or other Network Upgrades for a single Interconnection Request, or Network Upgrades identified for the interconnection of Generating Facilities associated with multiple Interconnection Requests, shall be determined, to the maximum extent practical, in a manner that accommodates the proposed Commercial Operation Date set forth in the LGIA of the Interconnection Customer(s) associated with the Stand Alone Network Upgrades or other Network Upgrades.

### **12.2.2 Construction of Network Upgrades that are or were an Obligation of an Entity other than the Interconnection Customer.**

The applicable Participating TO(s) shall be responsible for financing and constructing any Network Upgrades necessary to support the interconnection of the Generating Facility of an Interconnection Customer with an LGIA under this LGIP, whenever either:

- (i) the Network Upgrades were included in the Interconnection Base Case Data for a Phase II Interconnection Study on the basis that they were Network Upgrades associated with Generating Facilities of Interconnection Customers that have an executed LGIA (or its equivalent predecessor agreement) or unexecuted LGIA (or its equivalent predecessor agreement) filed with FERC, but the Network Upgrades will not otherwise be completed because such LGIA or equivalent predecessor agreement was subsequently terminated or the Interconnection Request has otherwise been withdrawn; or
- (ii) the Network Upgrades were included in the Interconnection Base Case Data for a Phase II Interconnection Study on the basis that they were Network Upgrades associated with Generating Facilities of Interconnection Customers that have an executed LGIA (or its equivalent predecessor agreement) or unexecuted LGIA (or its equivalent predecessor agreement) filed with FERC, but the Network Upgrades will not otherwise be completed in time to support the Interconnection Customer's In-Service Date because construction has not commenced in accordance with the terms of such LGIA (or its equivalent predecessor agreement).

The obligation under this LGIP Section 12.2.2 arises only after the CAISO, in coordination with the applicable Participating TO(s), determines that the Network Upgrades remain needed to support the interconnection of the Interconnection Customer's Generating Facility notwithstanding, as applicable, the absence or delay of the Generating Facility that is contractually, or was previously contractually, associated with the Network Upgrades.

Further, to the extent the timing of such Network Upgrades was not accounted for in determining a reasonable Commercial Operation Date among the CAISO, applicable Participating TO(s), and the Interconnection Customer as part of the Phase II Interconnection Study, the applicable Participating TO(s) will use Reasonable Efforts to ensure that the construction of such Network Upgrades can accommodate the Interconnection Customer's proposed Commercial Operation Date. If, despite Reasonable Efforts, it is anticipated that the Network Upgrades cannot be constructed in

time to accommodate the Interconnection Customer's proposed Commercial Operation Date, the Interconnection Customer may commit to pay the applicable Participating TO(s) any costs associated with expediting construction of the Network Upgrades to meet the original proposed Commercial Operation Date. The expediting costs under this LGIP Section 12.2.2 shall be in addition to the Interconnection Customer's cost responsibility assigned under LGIP Section 6.3.

### **12.2.3 Advancing Construction of Network Upgrades that are Part of the CAISO's Transmission Plan.**

An Interconnection Customer with an LGIA, in order to maintain its In-Service Date as specified in the LGIA, may request that the CAISO and applicable Participating TO(s) advance to the extent necessary the completion of Network Upgrades that: (i) are necessary to support such In-Service Date and (ii) would otherwise not be completed, pursuant to an approved CAISO Transmission Plan covering the PTO Service Territory of the applicable Participating TO(s), in time to support such In-Service Date. Upon such request, the applicable Participating TO(s) will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay the applicable Participating TO(s) any associated expediting costs. The Interconnection Customer shall be entitled to refunds, if any, in accordance with this LGIP and the LGIA, for any expediting costs paid.

## **12.3 Network Upgrades.**

### **12.3.1 Initial Funding.**

Unless the applicable Participating TO(s) elects to fund the full capital for identified Reliability and Delivery Network Upgrades, they shall be funded by the Interconnection Customer(s) either by means of drawing down the Interconnection Financial Security or by the provision of additional capital, at each Interconnection Customer's election, up to a maximum amount no greater than that established by the cost responsibility assigned to each Interconnection Customer(s) under LGIP Sections 7.3 and 7.4.

Where the applicable Participating TO(s) does not elect to fund the full capital for specific Reliability and Delivery Network Upgrades, the applicable Participating TO(s) shall be responsible for funding any capital costs for the Reliability and Delivery Network Upgrades that exceed the total cost responsibility assigned to the Interconnection Customer(s) under LGIP Sections 7.3 and 7.4.

- (a) Where the funding responsibility for any Reliability Network Upgrade or Delivery Network Upgrade has been assigned to a single Interconnection Customer in accordance with this LGIP, and the applicable Participating TO(s) has elected not to fund the full capital of the Reliability Network Upgrade or Delivery Network Upgrade, the applicable Participating TO(s) shall invoice the Interconnection Customer under LGIA Article 12.1 up to a maximum amount no greater than that established by the cost responsibility assigned to each Interconnection Customer(s) under LGIP Sections 7.3 and 7.4 for the Reliability Network Upgrade or Delivery Network Upgrade, respectively.
- (b) Where the funding responsibility for a Reliability Network Upgrade has been assigned to more than one Interconnection Customer in accordance with this LGIP, and the applicable Participating TO(s) has elected not to fund the full capital of the Reliability Network Upgrade, the applicable Participating TO(s) shall invoice each Interconnection Customer under LGIA Article 12 for such Reliability Network Upgrade based on the ratio of the maximum megawatt electrical output of each new Large Generating Facility or the amount of megawatt increase in the

generating capacity of each existing Generating Facility as listed the Generating Facility's Interconnection Request to the aggregate maximum megawatt electrical output of all such new Large Generating Facilities and increases in the generating capacity of existing Generating Facilities assigned responsibility for such Reliability Network Upgrade. Each Interconnection Customer may be invoiced up to a maximum amount no greater than that established by the cost responsibility assigned to that Interconnection Customer under LGIP Section 7.3.

- (c) Where the funding responsibility for a Delivery Network Upgrade has been assigned to more than one Interconnection Customer in accordance with this LGIP, and the applicable Participating TO(s) has elected not to fund the full capital of the Delivery Network Upgrade, the applicable Participating TO(s) shall invoice each Interconnection Customer under LGIA Article 12 for such Delivery Network Upgrade based on the percentage flow impact of each assigned Large Generating Facility on each Delivery Network Upgrade as determined by the Generation distribution factor methodology used in the On-Peak and Off-Peak Deliverability Assessments performed in the Phase II Interconnection Study. Each Interconnection Customer may be invoiced up to a maximum amount no greater than that established by the cost responsibility assigned to that Interconnection Customer under LGIP Section 7.4.

Any permissible extension of the Commercial Operation Date of a Large Generating Facility will not alter the Interconnection Customer's obligation to finance Network Upgrades where the Network Upgrades are required to meet the earlier Commercial Operation Date(s) of other Large Generating Facilities that have also been assigned cost responsibility for the Network Upgrades.

### **12.3.2 Repayment of Amounts Advanced for Network Upgrades and Refund of Interconnection Financial Security.**

Upon the Commercial Operation Date of the Large Generating Facility, which shall be the Commercial Operation Date of the entire Large Generating Facility, if phased, the Interconnection Customer shall be entitled to a repayment for the Interconnection Customer's contribution to the cost of Network Upgrades in accordance with its cost responsibility assigned under LGIP Sections 7.3 and 7.4. Such amount shall be paid to the Interconnection Customer by the applicable Participating TO(s) on a dollar-for-dollar basis either through (1) direct payments made on a levelized basis over the five-year period commencing on the Large Generating Facility's Commercial Operation Date; or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years of the Commercial Operation Date. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment. The Interconnection Customer may assign such repayment rights to any person.

Instead of direct payments, the Interconnection Customer may elect to receive Merchant Transmission Congestion Revenue Rights (CRRs) in accordance with the CAISO Tariff Section 36.11 associated with the Network Upgrades, or portions thereof that were funded by the Interconnection Customer. Such CRRs would take effect upon the Commercial Operation Date of the Large Generating Facility, which shall be the Commercial Operation Date of the entire Large Generating Facility, if phased, in accordance with the LGIA.

### **12.4 Special Provisions for Affected Systems and Other Affected Participating TOs.**



The Interconnection Customer shall enter into an agreement with the owner of the Affected System and/or other affected Participating TO(s), as applicable. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to the owner of the Affected System and/or other affected Participating TO(s) as well as the repayment by the owner of the Affected System and/or other affected Participating TO(s). If the affected entity is another Participating TO, the initial form of agreement will be the LGIA, as appropriately modified.

Any repayment by the owner of the Affected System shall be in accordance with FERC Order No. 2003-B (109 FERC ¶ 61,287).

## **Section 13 Miscellaneous.**

### **13.1 Confidentiality.**

Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Parties receiving the information that the information is confidential.

If requested by any Party, the other Parties shall provide in writing, the basis for asserting that the information referred to in this Section warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

The confidentiality provisions of this LGIP are limited to information provided pursuant to this LGIP.

#### **13.1.1 Scope.**

Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or breach of the LGIA; or (6) is required, in accordance with LGIP Section 13.1.6, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the LGIP. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

#### **13.1.2 Release of Confidential Information.**

No Party shall release or disclose Confidential Information to any other person, except to its employees, consultants, Affiliates (limited by FERC's Standards of Conduct requirements set forth in Part 358 of FERC's Regulations, 18 C.F.R. 358), or to parties who may be or considering providing financing to or equity participation with the

Interconnection Customer, or to potential purchasers or assignees of the Interconnection Customer, on a need-to-know basis in connection with these procedures, unless such person has first been advised of the confidentiality provisions of this LGIP Section 13.1 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this LGIP Section 13.1.

### **13.1.3 Rights.**

Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Parties. The disclosure by each Party to the other Parties of Confidential Information shall not be deemed a waiver by a Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

### **13.1.4 No Warranties.**

By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to the other Parties nor to enter into any further agreements or proceed with any other relationship or joint venture.

### **13.1.5 Standard of Care.**

Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under these procedures or its regulatory requirements.

### **13.1.6 Order of Disclosure.**

If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Parties with prompt notice of such request(s) or requirement(s) so that the other Parties may seek an appropriate protective order or waive compliance with the terms of the LGIP. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

### **13.1.7 Remedies.**

Monetary damages are inadequate to compensate a Party for another Party's breach of its obligations under this LGIP Section 13.1. Each Party accordingly agrees that the other Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party breaches or threatens to breach its obligations under this LGIP Section 13.1, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the breach of this LGIP Section 13.1, but shall be in addition to all other remedies available at law or in equity. Further, the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for

indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this LGIP Section 13.1.

#### **13.1.8 Disclosure to FERC, its Staff, or a State.**

Notwithstanding anything in this LGIP Section 13.1 to the contrary, and pursuant to 18 C.F.R. section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to the LGIP, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. section 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other applicable Parties when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner, consistent with applicable state rules and regulations.

**13.1.9** Subject to the exception in LGIP Section 13.1.8, any Confidential Information shall not be disclosed by the other Parties to any person not employed or retained by the other Parties, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Parties, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this LGIP or as a transmission service provider or a Balancing Authority including disclosing the Confidential Information to an RTO or ISO or to a subregional, regional or national reliability organization or planning group. The Party asserting confidentiality shall notify the other Parties in writing of the information it claims is confidential. Prior to any disclosures of another Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

**13.1.10** This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a breach of this provision).

**13.1.11** The Participating TO or CAISO shall, at the Interconnection Customer's election, destroy, in a confidential manner, or return the Confidential Information provided at the time of Confidential Information is no longer needed.

#### **13.2 Delegation of Responsibility.**

The CAISO and the Participating TOs may use the services of subcontractors as deemed appropriate to perform their obligations under this LGIP. The applicable Participating TO or CAISO shall remain primarily liable to the Interconnection Customer for the performance of its respective subcontractors and compliance with its obligations of this LGIP. The subcontractor shall keep all information provided confidential and shall use such information solely for the performance of such obligation for which it was provided and no other purpose.

**13.3 [NOT USED]**

**13.4 [NOT USED]**

**13.5 Disputes.**

If an Interconnection Customer disputes withdrawal of its Interconnection Request under LGIP Section 3.8, the CAISO will forward any information regarding the disputed withdrawal received under LGIP Section 3.8 within one (1) Business Day to the LGIP Executive Dispute Committee, consisting of the Vice President responsible for administration of this LGIP, the CAISO Vice President responsible for customer affairs, and an additional Vice President. The LGIP Executive Dispute Committee shall have five (5) Business Days to determine whether or not to restore the Interconnection Request. If the LGIP Executive Dispute Committee concludes that the Interconnection Request should have been withdrawn, the Interconnection Customer may seek relief in accordance with the CAISO ADR Procedures.

All disputes, other than those arising from LGIP Section 3.8, arising out of or in connection with this LGIP whereby relief is sought by or from the CAISO shall be settled in accordance with the CAISO ADR Procedures.

Disputes arising out of or in connection with this LGIP not subject to the CAISO ADR Procedures shall be resolved as follows:

**13.5.1 Submission.**

In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with the LGIA, the LGIP, or their performance, such Party (the "disputing Party") shall provide the other Party with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) calendar days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of the LGIA and LGIP.

**13.5.2 External Arbitration Procedures.**

Any arbitration initiated under these procedures shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) calendar days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) calendar days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules") and any applicable FERC regulations or RTO rules; provided, however, in the event of a conflict

between the Arbitration Rules and the terms of this LGIP Section 13.5, the terms of this LGIP Section 13.5 shall prevail.

### **13.5.3 Arbitration Decisions.**

Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) calendar days of appointment and shall notify the Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of the LGIA and LGIP and shall have no power to modify or change any provision of the LGIA and LGIP in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

### **13.5.4 Costs.**

Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

## **13.6 Local Furnishing Bonds.**

### **13.6.1 Participating TOs That Own Facilities Financed by Local Furnishing Bonds.**

This provision is applicable only to a Participating TO that has financed facilities for the local furnishing of electric energy with Local Furnishing Bonds. Notwithstanding any other provisions of this LGIP, the Participating TO and the CAISO shall not be required to provide Interconnection Service to the Interconnection Customer pursuant to this LGIP and the LGIA if the provision of such Interconnection Service would jeopardize the tax-exempt status of any Local Furnishing Bond(s) issued for the benefit of the Participating TO.

### **13.6.2 Alternative Procedures for Requesting Interconnection Service.**

If a Participating TO determines that the provision of Interconnection Service requested by the Interconnection Customer would jeopardize the tax-exempt status of any Local Furnishing Bond(s) issued for the benefit of the Participating TO, it shall advise the Interconnection Customer and the CAISO within (30) calendar days of receipt of the Interconnection Request.

The Interconnection Customer thereafter may renew its request for the same interconnection Service by tendering an application under Section 211 of the Federal Power Act, in which case the Participating TO, within ten (10) calendar days of receiving a copy of the Section 211 application, will waive its rights to a request for service under Section 213(a) of the Federal Power Act and to the issuance of a proposed order under Section 212(c) of the Federal Power Act, and the CAISO and Participating TO shall provide the requested Interconnection Service pursuant to the terms and conditions set forth in this LGIP and the LGIA.

## **13.7 Change in CAISO Operational Control.**

If the CAISO no longer has control of the portion of the CAISO Controlled Grid at the Point of Interconnection during the period when an Interconnection Request is pending, the CAISO shall transfer to the applicable former Participating TO or successor entity which has ownership of the Point of Interconnection any amount of the deposit or payment with interest thereon that exceeds the cost that it incurred to evaluate the request for interconnection. Any difference between such net deposit amount and the costs that the former Participating TO or successor entity incurs to evaluate the request for interconnection shall be paid by or refunded to the Interconnection Customer, as appropriate. The CAISO shall coordinate with the applicable former Participating TO or successor entity which has ownership of the Point of Interconnection to complete any Interconnection Study, as appropriate, that the CAISO has begun but has not completed. If the CAISO has tendered a draft LGIA to the Interconnection Customer but the Interconnection Customer has neither executed the LGIA nor requested the filing of an unexecuted LGIA with FERC, unless otherwise provided, the Interconnection Customer must complete negotiations with the applicable former Participating TO or successor entity which has the ownership of the Point of Interconnection.

**APPENDIX 1 to LGIP**  
**INTERCONNECTION REQUEST**

Provide three copies of this completed form pursuant to Section 7 of this LGIP Appendix 1 below.

1. The undersigned Interconnection Customer submits this request to interconnect its Large Generating Facility with the CAISO Controlled Grid pursuant to the CAISO Tariff.

2. This Interconnection Request is for (check one):  
                    A proposed new Large Generating Facility.  
                    An increase in the generating capacity or a Material Modification to an existing Generating Facility.

3. Requested Deliverability Status is for (check one):  
 Full Capacity  
 Energy Only

4. The Interconnection Customer provides the following information:

a. Address or location, including the county, of the proposed new Large Generating Facility site or, in the case of an existing Generating Facility, the name and specific location, including the county, of the existing Generating Facility;

Project Name:

Project Location:

Street Address:

City, State:

County:

Zip Code:

b. Maximum megawatt electrical output of the proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity of an existing Generating Facility;

Maximum megawatt electrical output (Net MW):                    or

Megawatt increase (Net MW):

c. Type of project (i.e., gas turbine, hydro, wind, etc.) and general description of the equipment configuration;

- |  |  |
|--|--|
| <input type="checkbox"/> <u>Cogeneration</u>   | <input type="checkbox"/> <u>Reciprocating Engine</u> |
| <input type="checkbox"/> <u>Biomass</u>        | <input type="checkbox"/> <u>Steam Turbine</u>        |
| <input type="checkbox"/> <u>Gas Turbine</u>    | <input type="checkbox"/> <u>Wind</u>                 |
| <input type="checkbox"/> <u>Hydro</u>          | <input type="checkbox"/> <u>Photovoltaic</u>         |
| <input type="checkbox"/> <u>Combined Cycle</u> |  |

Other (please describe):

General description of the equipment configuration:

d. Proposed In-Service Date, Trial Operation date and Commercial Operation Date by day, month, and year and term of service (dates must be sequential);

Proposed In-Service Date: \_\_\_\_\_ / /  
Proposed Trial Operation date: \_\_\_\_\_ / /  
Proposed Commercial Operation Date: \_\_\_\_\_ / /  
Proposed Term of Service (years): \_\_\_\_\_

e. Name, address, telephone number, and e-mail address of the Interconnection Customer's contact person;

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Company Name: \_\_\_\_\_  
Street Address: \_\_\_\_\_  
City, State: \_\_\_\_\_  
Zip Code: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Fax Number: \_\_\_\_\_  
Email Address: \_\_\_\_\_  
Interconnection  
Customer's  
DUNS Number \_\_\_\_\_

f. Approximate location of the proposed Point of Interconnection (i.e., specify interconnection point, voltage level, and the location of interconnection); and

g. Interconnection Customer data (set forth in Attachment A)

**The Interconnection Customer shall provide to the CAISO the technical data called for in LGIP Appendix 1, Attachment A. Three (3) copies are required.**

5. Applicable deposit amount as specified in the LGIP made payable to California ISO. Send check to CAISO along with the:

1. Appendix 1 to LGIP (Interconnection Request) for processing.
2. Attachment A to Appendix 1 (Interconnection Request Large Generating Facility Data).

6. Evidence of Site Exclusivity as specified in the LGIP and name(s), address(es) and contact information of site owner(s) (check one):

Is attached to this Interconnection Request  
Deposit in lieu of Site Exclusivity attached, Site Exclusivity will be provided at a later date in accordance with this LGIP

7. This Interconnection Request shall be submitted to the representative indicated below:

New Resource Interconnection  
California ISO  
P.O. Box 639014  
Folsom, CA 95763-9014



Overnight address: 151 Blue Ravine Road, Folsom, CA 95630

8. Representative of the Interconnection Customer to contact:

[To be completed by the Interconnection Customer]

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Company Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State: \_\_\_\_\_

Zip Code: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Fax Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

9. This Interconnection Request is submitted by:

Legal name of the Interconnection Customer:

By (signature):

Name (type or print):

Title:

Date:

**Attachment A**  
**To LGIP Appendix 1**  
**Interconnection Request**

**LARGE GENERATING FACILITY DATA**

Provide three copies of this completed form pursuant to Section 7 of LGIP Appendix 1.

**1. Provide two original prints and one reproducible copy (no larger than 36" x 24") of the following:**

- A. Site drawing to scale, showing generator location and Point of Interconnection with the CAISO Controlled Grid.
- B. Single-line diagram showing applicable equipment such as generating units, step-up transformers, auxiliary transformers, switches/disconnects of the proposed interconnection, including the required protection devices and circuit breakers. For wind generator farms, the one line diagram should include the distribution lines connecting the various groups of generating units, the generator capacitor banks, the step up transformers, the distribution lines, and the substation transformers and capacitor banks at the Point of Interconnection with the CAISO Controlled Grid.

**2. Generating Facility Information**

- A. Total Generating Facility rated output (kW): \_\_\_\_\_
- B. Generating Facility auxiliary Load (kW): \_\_\_\_\_
- C. Project net capacity (kW): \_\_\_\_\_
- D. Standby Load when Generating Facility is off-line (kW): \_\_\_\_\_
- E. Number of Generating Units: \_\_\_\_\_  
(Please repeat the following items for each generator)
- F. Individual generator rated output (kW for each unit): \_\_\_\_\_
- G. Manufacturer: \_\_\_\_\_
- H. Year Manufactured: \_\_\_\_\_
- I. Nominal Terminal Voltage: \_\_\_\_\_
- J. Rated Power Factor (%): \_\_\_\_\_
- K. Type (Induction, Synchronous, D.C. with Inverter): \_\_\_\_\_
- L. Phase (3 phase or single phase): \_\_\_\_\_
- M. Connection (Delta, Grounded WYE, Ungrounded WYE, impedance grounded): \_\_\_\_\_
  
- N. Generator Voltage Regulation Range: \_\_\_\_\_
- O. Generator Power Factor Regulation Range: \_\_\_\_\_
- P. For combined cycle plants, specify the plant output for an outage of the steam turbine or an outage of a single combustion turbine: \_\_\_\_\_

**3. Synchronous Generator – General Information:**

(Please repeat the following for each generator)

- A. Rated Generator speed (rpm): \_\_\_\_\_
- B. Rated MVA: \_\_\_\_\_
- C. Rated Generator Power Factor: \_\_\_\_\_
- D. Generator Efficiency at Rated Load (%): \_\_\_\_\_
- E. Moment of Inertia (including prime mover): \_\_\_\_\_
- F. Inertia Time Constant (on machine base) H: \_\_\_\_\_ sec or MJ/MVA
- G. SCR (Short-Circuit Ratio - the ratio of the field current required for rated open-circuit voltage to the field current required for rated short-circuit current): \_\_\_\_\_
- H. Please attach generator reactive capability curves.
- I. Rated Hydrogen Cooling Pressure in psig (Steam Units only): \_\_\_\_\_
- J. Please attach a plot of generator terminal voltage versus field current that shows the air

gap line, the open-circuit saturation curve, and the saturation curve at full load and rated power factor.

**4. Excitation System Information**

(Please repeat the following for each generator)

A. Indicate the Manufacturer \_\_\_\_\_ and Type \_\_\_\_\_ of excitation system used for the generator. For exciter type, please choose from 1 to 8 below or describe the specific excitation system.

- (1) Rotating DC commutator exciter with continuously acting regulator. The regulator power source is independent of the generator terminal voltage and current.
- (2) Rotating DC commutator exciter with continuously acting regulator. The regulator power source is bus fed from the generator terminal voltage.
- (3) Rotating DC commutator exciter with non-continuously acting regulator (i.e., regulator adjustments are made in discrete increments).
- (4) Rotating AC Alternator Exciter with non-controlled (diode) rectifiers. The regulator power source is independent of the generator terminal voltage and current (not bus-fed).
- (5) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers. The regulator power source is fed from the exciter output voltage.
- (6) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers.
- (7) Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from the generator terminal voltage.
- (8) Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from a combination of generator terminal voltage and current (compound-source controlled rectifiers system).

B. Attach a copy of the block diagram of the excitation system from its instruction manual. The diagram should show the input, output, and all feedback loops of the excitation system.

C. Excitation system response ratio (ASA): \_\_\_\_\_

D. Full load rated exciter output voltage: \_\_\_\_\_

E. Maximum exciter output voltage (ceiling voltage): \_\_\_\_\_

F. Other comments regarding the excitation system?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**5. Power System Stabilizer Information.**

(Please repeat the following for each generator. All new generators are required to install PSS unless an exemption has been obtained from WECC. Such an exemption can be obtained for units that do not have suitable excitation systems.)

A. Manufacturer: \_\_\_\_\_

B. Is the PSS digital or analog? \_\_\_\_\_

C. Note the input signal source for the PSS?  
\_\_\_\_\_ Bus frequency \_\_\_\_\_ Shaft speed \_\_\_\_\_ Bus Voltage  
\_\_\_\_\_ Other (specify source)

D. Please attach a copy of a block diagram of the PSS from the PSS Instruction Manual and the correspondence between dial settings and the time constants or PSS gain.

E. Other comments regarding the PSS?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**6. Turbine-Governor Information**

(Please repeat the following for each generator)

Please complete Part A for steam, gas or combined-cycle turbines, Part B for hydro turbines, and Part C for both.

A. Steam, gas or combined-cycle turbines:

- (1) List type of unit (Steam, Gas, or Combined-cycle): \_\_\_\_\_
- (2) If steam or combined-cycle, does the turbine system have a reheat process (i.e., both high and low pressure turbines)? \_\_\_\_\_
- (3) If steam with reheat process, or if combined-cycle, indicate in the space provided, the percent of full load power produced by each turbine:  
Low pressure turbine or gas turbine: \_\_\_\_\_ %  
High pressure turbine or steam turbine: \_\_\_\_\_ %

B. Hydro turbines:

- (1) Turbine efficiency at rated load: \_\_\_\_\_ %
- (2) Length of penstock: \_\_\_\_\_ ft
- (3) Average cross-sectional area of the penstock: \_\_\_\_\_ ft<sup>2</sup>
- (4) Typical maximum head (vertical distance from the bottom of the penstock, at the gate, to the water level): \_\_\_\_\_ ft
- (5) Is the water supply run-of-the-river or reservoir: \_\_\_\_\_
- (6) Water flow rate at the typical maximum head: \_\_\_\_\_ ft<sup>3</sup>/sec
- (7) Average energy rate: \_\_\_\_\_ kW-hrs/acre-ft
- (8) Estimated yearly energy production: \_\_\_\_\_ kW-hrs

C. Complete this section for each machine, independent of the turbine type.

- (1) Turbine manufacturer: \_\_\_\_\_
- (2) Maximum turbine power output: \_\_\_\_\_ MW
- (3) Minimum turbine power output (while on line): \_\_\_\_\_ MW
- (4) Governor information:
  - (a) Drop setting (speed regulation): \_\_\_\_\_
  - (b) Is the governor mechanical-hydraulic or electro-hydraulic (Electro-hydraulic governors have an electronic speed sensor and transducer.)? \_\_\_\_\_
  - (c) Other comments regarding the turbine governor system?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## **7. Synchronous Generator and Associated Equipment – Dynamic Models:**

For each generator, governor, exciter and power system stabilizer, select the appropriate dynamic model from the General Electric PSLF Program Manual and provide the required input data. The manual is available on the GE website at [www.gepower.com](http://www.gepower.com). Select the following links within the website: 1) Our Businesses, 2) GE Power Systems, 3) Energy Consulting, 4) GE PSLF Software, 5) GE PSLF User's Manual.

There are links within the GE PSLF User's Manual to detailed descriptions of specific models, a definition of each parameter, a list of the output channels, explanatory notes, and a control system block diagram. The block diagrams are also available on the CAISO Website.

If you require assistance in developing the models, we suggest you contact General Electric. Accurate models are important to obtain accurate study results. Costs associated with any

changes in facility requirements that are due to differences between model data provided by the generation developer and the actual generator test data, may be the responsibility of the generation developer.

**8. Induction Generator Data:**

- A. Rated Generator Power Factor at rated load: \_\_\_\_\_
- B. Moment of Inertia (including prime mover): \_\_\_\_\_
- C. Do you wish reclose blocking? Yes \_\_\_\_\_, No \_\_\_\_\_

Note: Sufficient capacitance may be on the line now, or in the future, and the generator may self-excite unexpectedly.

**9. Generator Short Circuit Data**

For each generator, provide the following reactances expressed in p.u. on the generator base:

- $X''1$  – positive sequence subtransient reactance: \_\_\_\_\_
- $X''2$  – negative sequence subtransient reactance: \_\_\_\_\_
- $X''0$  – zero sequence subtransient reactance: \_\_\_\_\_

Generator Grounding:

- A. Solidly grounded
- B. Grounded through an impedance  
Impedance value in p.u on generator base. R: \_\_\_\_\_ p.u.  
X: \_\_\_\_\_ p.u.
- C. Ungrounded

**10. Step-Up Transformer Data**

For each step-up transformer, fill out the data form provided in Table 1.

**11. Line Data**

There is no need to provide data for new lines that are to be planned by the Participating TO. However, for transmission lines that are to be planned by the generation developer, please provide the following information:

Nominal Voltage: \_\_\_\_\_  
Line Length (miles): \_\_\_\_\_  
Line termination Points: \_\_\_\_\_  
Conductor Type: \_\_\_\_\_ Size: \_\_\_\_\_  
If bundled. Number per phase: \_\_\_\_\_, Bundle spacing: \_\_\_\_\_ in.  
Phase Configuration. Vertical: \_\_\_\_\_, Horizontal: \_\_\_\_\_  
Phase Spacing (ft): A-B: \_\_\_\_\_, B-C: \_\_\_\_\_, C-A: \_\_\_\_\_  
Distance of lowest conductor to Ground: \_\_\_\_\_ ft  
Ground Wire Type: \_\_\_\_\_ Size: \_\_\_\_\_ Distance to Ground: \_\_\_\_\_ ft  
Attach Tower Configuration Diagram  
Summer line ratings in amperes (normal and emergency) \_\_\_\_\_  
Resistance ( R ): \_\_\_\_\_ p.u.\*\*  
Reactance: ( X ): \_\_\_\_\_ p.u.\*\*  
Line Charging (B/2): \_\_\_\_\_ p.u.\*\*

\*\* On 100-MVA and nominal line voltage (kV) Base

**12. Wind Generators**

Number of generators to be interconnected pursuant to this Interconnection Request: \_\_\_\_\_

Elevation: \_\_\_\_\_ Single Phase \_\_\_\_\_ Three Phase

Inverter manufacturer, model name, number, and version:

---

List of adjustable setpoints for the protective equipment or software:

---

Field Volts: \_\_\_\_\_

Field Amperes: \_\_\_\_\_

Motoring Power (kW): \_\_\_\_\_

Neutral Grounding Resistor (If Applicable): \_\_\_\_\_

$I_2^2t$  or K (Heating Time Constant): \_\_\_\_\_

Rotor Resistance: \_\_\_\_\_

Stator Resistance: \_\_\_\_\_

Stator Reactance: \_\_\_\_\_

Rotor Reactance: \_\_\_\_\_

Magnetizing Reactance: \_\_\_\_\_

Short Circuit Reactance: \_\_\_\_\_

Exciting Current: \_\_\_\_\_

Temperature Rise: \_\_\_\_\_

Frame Size: \_\_\_\_\_

Design Letter: \_\_\_\_\_

Reactive Power Required In Vars (No Load): \_\_\_\_\_

Reactive Power Required In Vars (Full Load): \_\_\_\_\_

Total Rotating Inertia, H: \_\_\_\_\_ Per Unit on KVA Base

Note: A completed General Electric Company Power Systems Load Flow (PSLF) data sheet must be supplied with the Interconnection Request. If other data sheets are more appropriate to the proposed device then they shall be provided and discussed at Scoping Meeting.

TABLE 1  
TRANSFORMER DATA

| UNIT  |                  |                  |                  |
|---|------------------|------------------|------------------|
| NUMBER OF TRANSFORMERS  | PHASE            |                  |                  |
| <u>RATED KVA</u>  | <u>H Winding</u> | <u>X Winding</u> | <u>Y Winding</u> |
| <u>Connection</u><br>(Delta, Wye, Gnd.)                                 | _____            | _____            | _____            |
| <u>55 C Rise</u>  | _____            | _____            | _____            |
| <u>65 C Rise</u>  | _____            | _____            | _____            |
| <u>RATED VOLTAGE</u>  | _____            | _____            | _____            |
| <u>BIL</u>  | _____            | _____            | _____            |
| <u>AVAILABLE TAPS</u><br>(planned or existing)                          | _____            | _____            | _____            |
| <u>LOAD TAP CHANGER?</u>  | _____            | _____            | _____            |
| <u>TAP SETTINGS</u>   | _____            | _____            | _____            |
| <u>COOLING TYPE :</u> OA      OA/FA      OA/FA/FA      OA/FOA           | _____            | _____            | _____            |
| <u>IMPEDANCE</u>  | <u>H-X</u>       | <u>H-Y</u>       | <u>X-Y</u>       |
| Percent   | _____            | _____            | _____            |
| MVA Base  | _____            | _____            | _____            |
| Tested Taps   | _____            | _____            | _____            |
| <u>WINDING RESISTANCE</u>   | <u>H</u>         | <u>X</u>         | <u>Y</u>         |
| Ohms  | _____            | _____            | _____            |
| <u>CURRENT TRANSFORMER RATIOS</u>                                       |                  |                  |                  |
| <u>H</u> _____  | <u>X</u> _____   | <u>Y</u> _____   | <u>N</u> _____   |
| <u>PERCENT EXCITING CURRENT 100 % Voltage; _____ 110% Voltage _____</u> |                  |                  |                  |

Supply copy of nameplate and manufacture's test report when available

## Appendix 2 to

### Large Generator Interconnection Procedures (LGIP) Relating to the Transition Cluster

#### Section 1. Objective, Applicability and Definitions.

##### 1.1 Objective and Applicability.

The objective of this Appendix 2 to the Large Generator Interconnection Procedures (LGIP) is to implement the requirements for interconnecting to the CAISO Controlled Grid those Generating Facilities assigned to the Transition Cluster. All Interconnection Requests assigned to the Transition Cluster shall be deemed to have been assigned to a Queue Cluster Window for purposes of LGIP Section 1.1 and therefore all provisions of the LGIP apply to Generating Facilities included in the Transition Cluster, except as set forth herein.

##### 1.2 Definitions.

###### 1.2.1 Master Definitions Supplement and Other General Definition Rules.

Unless the context otherwise requires, any word or expression defined in the Master Definitions Supplement, Appendix A to the CAISO Tariff, shall have the same meaning where used in this Appendix 2 to the LGIP. Further, unless the context otherwise requires, any word or expression defined in LGIP Section 1.2 shall have the same meaning where used in this Appendix 2 to the LGIP. References to LGIP in this Appendix 2 are to Appendix Y of the CAISO Tariff.

###### 1.2.2 Special Definitions for this LGIP Appendix 2.

In this Appendix 2 to the LGIP, the following words and expressions shall have the meanings set opposite them:

“Serial Study Group” shall mean the collection of valid Interconnection Requests with an assigned Queue Position on or before June 1, 2008 studied in accordance with the interconnection procedures set forth in the version of the LGIP set forth in CAISO Tariff Appendix U as permitted by the decision of FERC in Docket No. ER08-960-000.

“Transition Cluster” shall mean the collection of valid Interconnection Requests with an assigned Queue Position on or before June 1, 2008 that were not included as part of the Serial Study Group by the decision of FERC in Docket No. ER08-960-000.

“Transition Cluster Interconnection Study Deposit” shall mean, for each Interconnection Request in the Transition Cluster other than those subject to Section 3.2 of this Appendix 2 to the LGIP, the difference between (i) \$250,000 and (ii) the total amount the Interconnection Customer has been charged for Interconnection Studies performed under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement plus the balance of any remaining deposit provided under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement. For an Interconnection Request subject to Section 3.2 of this Appendix 2 to the LGIP, the amount of the Transition Cluster Interconnection Study Deposit shall be the difference between (i) \$100,000 and (ii) the total amount the Interconnection Customer has been charged for Interconnection Studies performed under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement plus the balance of any



remaining deposit provided under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement.

## **2. Queue Position.**

The Queue Position of any Interconnection Request included in the Transition Cluster shall be deemed to be lower than that of any Interconnection Request included in the Serial Study Group for purposes of performing Interconnection Studies for Large Generating Facilities whose Interconnection Requests are in the Serial Study Group.

## **3. Requirements to Remain in the Transition Cluster.**

### **3.1 General Requirements for Large Generating Facilities.**

An Interconnection Request deemed to be included in the Transition Cluster in accordance with the decision of FERC in Docket No. ER08-960-000 will be deemed to have been withdrawn from the Transition Cluster unless the Interconnection Customer provides, within sixty (60) calendar days from the effective date of this Appendix 2 to the LGIP, all of the following: (i) a Transition Cluster Interconnection Study Deposit, (ii) a statement of the requested deliverability status, (iii) a preferred Point of Interconnection and voltage level and all other technical data required by the LGIP, if not already submitted to the CAISO, and (iv) demonstration of Site Exclusivity or a posting of a Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity must be, at a minimum, through the anticipated Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility.

Section 3.8 of the LGIP shall not apply to a failure to satisfy the requirements of this Section 3.1 of this Appendix 2 to the LGIP.

### **3.2 Special Requirements for Certain Small and Existing Large Generating Facilities.**

An Interconnection Customer with an Interconnection Request in the Transition Cluster relating to (a) a Small Generating Facility seeking a Deliverability Assessment or (b) a Generating Facility, subject to the LGIP in accordance with CAISO Tariff Section 25.1.1, that has achieved Commercial Operation prior to the date of the Interconnection Request, and is seeking to increase the capacity of the Generating Facility by less than 20 MW, will be deemed to have withdrawn its Interconnection Request from the Transition Cluster unless it provides, within sixty (60) calendar days from the effective date of this Appendix 2 to the LGIP, all of the following: (i) a Transition Cluster Interconnection Study Deposit, (ii) a statement of the requested deliverability status, (iii) a preferred Point of Interconnection and voltage level and all other technical data required by the LGIP, if not already submitted to the CAISO, and (iv) demonstration of Site Exclusivity or a posting of a Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity, at a minimum, must be through the Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility.

Section 3.8 of the LGIP shall not apply to a failure to satisfy the requirements of this Section 3.2 of this Appendix 2 to the LGIP.

### **3.3 Communication of Transition Cluster Interconnection Study Deposit Amount.**

The CAISO shall provide each Interconnection Customer with the amount of its Transition Cluster Interconnection Study Deposit within five (5) Business Days after the effective date of this Appendix 2 to the LGIP.

### **3.4 Use of the Transition Cluster Interconnection Study Deposit.**

The CAISO shall deposit all Transition Cluster Interconnection Study Deposits in an interest bearing account at a bank or financial institution designated by the CAISO. The Transition Cluster Interconnection Study Deposit shall be applied to pay for prudent costs incurred by the CAISO, the Participating TOs, or third parties at the direction of the CAISO or Participating TOs, as applicable, to perform and administer the Interconnection Studies. The Transition Cluster Interconnection Study Deposit is not refundable.

Upon execution of an LGIA by an Interconnection Customer, the CAISO and the applicable Participating TO(s), or the approval by FERC of an unexecuted LGIA, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Transition Cluster Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceed the costs the CAISO, Participating TOs, or third parties have incurred on the Interconnection Customer's behalf.

Notwithstanding the foregoing, an Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request during an Interconnection Study Cycle shall be obligated to pay to the CAISO all costs in excess of the Transition Cluster Interconnection Study Deposit that have been prudently incurred or irrevocably have been committed to be incurred with respect to that Interconnection Request prior to withdrawal. The CAISO will reimburse the applicable Participating TO(s) or third parties, as applicable, for all work performed associated with the Interconnection Request at the CAISO's direction. The Interconnection Customer must pay all monies due before it is allowed to obtain any Interconnection Study data or results.

All non-refundable portions of the Transition Cluster Interconnection Study Deposit that exceed the costs the CAISO, Participating TOs, or third parties have incurred on the Interconnection Customer's behalf shall be treated in accordance with CAISO Tariff Section 37.9.4.

### **3.5 Obligation for Study Costs.**

The CAISO shall charge and the Interconnection Customer shall pay the actual costs of the Interconnection Studies. The CAISO shall issue invoices for Interconnection Studies that shall include a detailed and itemized accounting of the cost of each Interconnection Study. The CAISO shall draw from the Transition Cluster Interconnection Study Deposit any undisputed costs within thirty (30) calendar days after issuance of an invoice therefor. Whenever the actual cost of performing the Interconnection Studies exceeds the Transition Cluster Interconnection Study Deposit, the Interconnection Customer shall pay the undisputed difference in accordance with the CAISO issued invoice within thirty (30) calendar days. The CAISO shall not be obligated to continue to have any studies conducted unless the Interconnection Customer has paid all undisputed amounts in compliance herewith. In the event an Interconnection Study is performed by the CAISO, the Interconnection Customer shall pay only the costs of those activities performed by the Participating TO to adequately review or validate that Interconnection Study.

## **4. Phase I Interconnection Study.**

### **4.1 Grouping Interconnection Requests and Base Cases.**

Interconnection Requests in the Transition Cluster shall be grouped in accordance with LGIP Section 6.1. Rather than Generation submitted during a Queue Cluster Window, the Interconnection Base Case Data for the Transition Cluster shall reflect the Generation

from those Interconnection Requests that satisfy the requirements of Sections 3.1 and 3.2 of this Appendix 2 to the LGIP.

#### **4.2 Schedule.**

The Phase I Interconnection Study, as described in LGIP Section 6, including the grouping and Interconnection Base Case Data development, for the Transition Cluster shall commence no later than December 1, 2008 or sixty (60) calendar days after the effective date of this Appendix 2 to the LGIP, whichever is later. Results of the Phase I Interconnection Study shall be provided to the Interconnection Customer within two hundred forty (240) calendar days after commencement under this Section.

#### **4.3 Results Meeting.**

Within sixty (60) calendar days after providing the Phase I Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s), the CAISO and the Interconnection Customer shall meet to discuss the results of the Phase I Interconnection Study, including assigned cost responsibility.

### **5. Phase II Interconnection Study.**

#### **5.1 Phase II Interconnection Study Procedures.**

The Phase II Interconnection Study, as described in LGIP Section 7, for the Transition Cluster shall commence no later than one hundred twenty (120) calendar days after publication of the Phase I Interconnection Study report. Results of the Phase II Interconnection Study shall be provided to the Interconnection Customer within three hundred thirty (330) calendar days after commencement under this Section.

#### **5.2 Coordination of the Phase II Interconnection Study with the Transmission Planning Process.**

As part of the Uniform Planning Assumptions and Study Plan developed under Section 24 of the CAISO Tariff during calendar year 2009, the CAISO shall include technical analyses intended to identify, at a minimum, conceptual transmission upgrades that may access proposed Large Generating Facilities included in the Transition Cluster that are located in Energy Resource Areas.

### **6. Interconnection Financial Security.**

The provisions of LGIP Section 9 shall apply to the Transition Cluster, except that the initial posting of Interconnection Financial Security under LGIP Section 9.2 in Appendix Y shall be required on or before one hundred twenty (120) calendar days after publication of the Phase I Interconnection Study report.

**Appendix 3 to LGIP**

**LARGE GENERATOR INTERCONNECTION STUDY PROCESS AGREEMENT**

**THIS AGREEMENT** is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_, ("Interconnection Customer") and the California Independent System Operator Corporation, a California nonprofit public benefit corporation existing under the laws of the State of California, ("CAISO"). The Interconnection Customer and the CAISO each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

**WHEREAS**, the Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_; and

**WHEREAS**, the Interconnection Customer desires to interconnect the Large Generating Facility with the CAISO Controlled Grid; and

**WHEREAS**, the Interconnection Customer has requested the CAISO to conduct or cause to be performed Interconnection Studies to assess the system impact of interconnecting the Large Generating Facility to the CAISO Controlled Grid and to specify and estimate the cost of the equipment, engineering, procurement and construction work needed on the Participating TO's electric system in accordance with Good Utility Practice to physically and electrically connect the Large Generating Facility to the CAISO Controlled Grid;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 \_\_\_\_\_ When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the CAISO's FERC-approved Large Generation Interconnection Procedures in CAISO Tariff Appendix Y ("LGIP") or the Master Definitions Supplement, Appendix A to the CAISO Tariff, as applicable.
- 2.0 \_\_\_\_\_ The Interconnection Customer elects and the CAISO shall conduct or cause to be performed Interconnection Studies, including any accelerated Interconnection Study, consistent with the LGIP in accordance with the CAISO Tariff.
- 3.0 \_\_\_\_\_ The scope of the Interconnection Studies shall be subject to the assumptions set forth in Appendices A and B to this Agreement.
- 4.0 \_\_\_\_\_ The Interconnection Studies will be based upon the technical information provided by the Interconnection Customer in the Interconnection Request, as may be modified as the result of the Scoping Meeting, subject to any modifications in accordance with Section 6.7.2 of the LGIP and modifications to the proposed Commercial Operation Date of the Large Generating Facility permitted by the LGIP. The CAISO reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Studies. If the Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the Interconnection Studies may be modified as specified in the LGIP.

5.0 The Interconnection Study report for each Interconnection Study shall provide the information specified in the LGIP.

6.0 The Interconnection Customer shall provide an Interconnection Study Deposit, a Site Exclusivity Deposit, if applicable, and other Interconnection Financial Security for the performance of the Interconnection Studies in accordance with the provisions of Sections 3.5.1 and 9 of the LGIP.

Following the issuance of an Interconnection Study report, the CAISO shall charge and the Interconnection Customer shall pay its share of the actual costs of the Interconnection Study pursuant to Sections 3.5.1 and 7.8 of the LGIP.

Any difference between the deposits made toward the Interconnection Study process and associated administrative costs, including any accelerated studies, and the actual cost of the Interconnection Studies and associated administrative costs shall be paid by or refunded to the Interconnection Customer, in the appropriate allocation, in accordance with Section 3.5.1 of the LGIP.

7.0 Pursuant to Section 3.7 of the LGIP, the CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems. The CAISO may provide a copy of the Phase I Interconnection Study results to an Affected System Operator and the Western Electricity Coordinating Council. Requests for review and input from Affected System Operators or the Western Electricity Coordinating Council may arrive at any time prior to interconnection.

8.0 Substantial portions of technical data and assumptions used to perform the Phase I Interconnection Study, such as system conditions, existing and planned generation, and unit modeling, may change after the CAISO provides the Interconnection Study results to the Interconnection Customer. Interconnection Study results will reflect available data at the time the CAISO provides the Phase I Interconnection Study report to the Interconnection Customer. The CAISO shall not be responsible for any additional costs, including, without limitation, costs of new or additional facilities, system upgrades, or schedule changes, that may be incurred by the Interconnection Customer as a result of changes in such data and assumptions.

9.0 **[NOT USED]**

10.0 The CAISO shall maintain records and accounts of all costs incurred in performing the Interconnection Study in sufficient detail to allow verification of all costs incurred, including associated overheads. The Interconnection Customer shall have the right, upon reasonable notice, within a reasonable time at the CAISO's offices and at its own expense, to audit the CAISO's records as necessary and as appropriate in order to verify costs incurred by the CAISO. Any audit requested by the Interconnection Customer shall be completed, and written notice of any audit dispute provided to the CAISO representative, within one hundred eighty (180) calendar days following receipt by the Interconnection Customer of the CAISO's notification of the final costs of the Interconnection Study.

11.0 In accordance with Section 3.8 of the LGIP, the Interconnection Customer may withdraw its Interconnection Request at any time by written notice to the CAISO. Upon receipt of such notice, this Agreement shall terminate, subject to the requirements of Section 3.5.1 and 13.1 of the LGIP.

- 12.0 Pursuant to Section 4 of the LGIP, this Agreement shall become effective upon the date the fully executed Agreement is received by the CAISO. If the CAISO does not receive the fully executed Agreement and deposit or other Interconnection Financial Security pursuant to Section 3.5.1 of the LGIP, then the Interconnection Request will be deemed withdrawn upon the Interconnection Customer's receipt of written notice by the CAISO pursuant to Section 3.8 of the LGIP.
- 13.0 Miscellaneous.
- 13.1 Dispute Resolution. Any dispute, or assertion of a claim, arising out of or in connection with this Agreement, shall be resolved in accordance with Section 13.5 of the LGIP.
- 13.2 Confidentiality. Confidential Information shall be treated in accordance with Section 13.1 of the LGIP.
- 13.3 Binding Effect. This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 13.4 Conflicts. In the event of a conflict between the body of this Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.
- 13.5 Rules of Interpretation. This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article or Section of this Agreement or such Appendix to this Agreement, or such Section of the LGIP or such Appendix to the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article, Section, or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".
- 13.6 Entire Agreement. This Agreement, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part

of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.

13.7 No Third Party Beneficiaries. This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.

13.8 Waiver. The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO or CAISO. Any waiver of this Agreement shall, if requested, be provided in writing.

Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.

13.9 Headings. The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.

13.10 Multiple Counterparts. This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

13.11 Amendment. The Parties may by mutual agreement amend this Agreement by a written instrument duly executed by both of the Parties.

13.12 Modification by the Parties. The Parties may by mutual agreement amend the Appendices to this Agreement by a written instrument duly executed by both of the Parties. Such amendment shall become effective and a part of this Agreement upon satisfaction of all applicable laws and regulations.

13.13 Reservation of Rights. The CAISO shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or

206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

- 13.14 No Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.
- 13.15 Assignment. This Agreement may be assigned by a Party only with the written consent of the other Party; provided that a Party may assign this Agreement without the consent of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; and provided further that the Interconnection Customer shall have the right to assign this Agreement, without the consent of the other Party, for collateral security purposes to aid in providing financing for the Large Generating Facility, provided that the Interconnection Customer will require any secured party, trustee or mortgagee to notify the other Party of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Section will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the other Party of the date and particulars of any such exercise of assignment right(s). Any attempted assignment that violates this Section is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.



**IN WITNESS THEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

**California Independent System Operator Corporation**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[Insert name of the Interconnection Customer]**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Appendix A**

**Large Generator Interconnection  
Study Process Agreement**

**ASSUMPTIONS USED IN CONDUCTING THE  
PHASE I INTERCONNECTION STUDY**

The Phase I Interconnection Study will be based upon the information set forth in the Interconnection Request and agreed upon in the Scoping Meeting held on \_\_\_\_\_, subject to any modifications in accordance with Section 6.7.2 of the LGIP, and the following assumptions:

Designation of Point of Interconnection and configuration to be studied.

Deliverability status requested (full capacity or Energy only)

**Appendix B**

**Large Generator Interconnection  
Study Process Agreement**

**DATA FORM TO BE PROVIDED BY THE INTERCONNECTION CUSTOMER  
PRIOR TO COMMENCEMENT OF THE PHASE II INTERCONNECTION STUDY**

Generating Facility size (MW): \_\_\_\_\_

Provide two copies of this completed form and other required plans and diagrams in accordance with Section 7.1 of the LGIP.

Provide location plan and one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.

One set of metering is required for each generation connection to the new bus or existing CAISO Controlled Grid station. Number of generation connections: \_\_\_\_\_

On the one line indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)

On the one line indicate the location of auxiliary power. (Minimum load on CT/PT)

Will an alternate source of auxiliary power be available during CT/PT maintenance?  
Yes \_\_\_\_\_ No \_\_\_\_\_

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? Yes \_\_\_\_\_ No \_\_\_\_\_  
(Please indicate on one line).

What type of control system or PLC will be located at the Interconnection Customer's Large Generating Facility?

\_\_\_\_\_

What protocol does the control system or PLC use?

\_\_\_\_\_

Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.

Physical dimensions of the proposed interconnection station:

Bus length from generation to interconnection station:

Line length from interconnection station to the Participating TO's transmission line.

Tower number observed in the field. (Painted on tower leg)\*

Number of third party easements required for transmission lines\*:

\* To be completed in coordination with the Participating TO or CAISO.

Is the Large Generating Facility in the Participating TO's service area?

Yes                      No

Local service provider for auxiliary and other power: \_\_\_\_\_

Please provide proposed schedule dates:

Environmental survey start: \_\_\_\_\_

Environmental impact report submittal: \_\_\_\_\_

Procurement of project equipment: \_\_\_\_\_

Begin Construction \_\_\_\_\_ Date: \_\_\_\_\_

Generator step-up transformer \_\_\_\_\_ Date: \_\_\_\_\_  
receives back feed power

Generation Testing \_\_\_\_\_ Date: \_\_\_\_\_

Commercial Operation Date: \_\_\_\_\_

Level of Deliverability: Choose one of the following:

Energy Only

Full Capacity

Appendix 4 to LGIP

**AGREEMENT FOR THE ALLOCATION OF RESPONSIBILITIES WITH REGARD TO  
LARGE GENERATOR INTERCONNECTION PROCEDURES AND INTERCONNECTION STUDY  
AGREEMENTS**

This Agreement for the Allocation of Responsibilities With Regard to Large Generator Interconnection Procedures and Interconnection Study Agreements ("Agreement"), dated \_\_\_\_\_, is entered into between the California Independent System Operator Corporation ("CAISO") and [NAME OF PTO] ("PTO"). The CAISO and PTO are jointly referred to as the "Parties" and individually, as a "Party."

WHEREAS, this Agreement will ensure an independent assessment of new Large Generating Facility impacts on the CAISO Controlled Grid and take advantage of the respective expertise of the Parties to facilitate efficient and cost effective Interconnection Study procedures in a manner consistent with the Federal Energy Regulatory Commission's ("FERC") July 1, 2005 Order (112 FERC ¶ 61,009), FERC's August 26, 2005 Order (112 FERC ¶ 61,231), and prior FERC Orders recognizing that Order No. 2003 did not allocate responsibilities between transmission owners and transmission providers for the provision of Interconnection Service and suggesting those parties enter into an agreement to allocate those responsibilities. Southwest Power Pool, Inc., 106 FERC ¶ 61,254 (2004).

NOW THEREFORE, in view of the respective responsibilities assigned to the Parties and the foregoing FERC orders, and the provisions of the CAISO's Large Generator Interconnection Procedures set forth in CAISO Tariff Appendix Y ("LGIP"), the CAISO and PTO agree to the following allocation of responsibilities for a centralized Interconnection Study process under the direction and oversight of the CAISO:

**1. DEFINITIONS.**

Unless otherwise defined herein, all capitalized terms shall have the meaning set forth in the CAISO Tariff.

**2. TERM OF AGREEMENT.**

This Agreement shall become effective upon the date specified in the first paragraph above and shall remain in effect until (1) terminated by all Parties in writing, or (2) with respect to the PTO, upon the termination of that entity's status as a PTO pursuant to the Transmission Control Agreement, as amended from time to time.

**3. PROVISIONS FOR ALLOCATION OF RESPONSIBILITIES BETWEEN CAISO AND PTO.**

**3.1 Interconnection Service:** The Parties acknowledge that, as the transmission provider, the CAISO is responsible for reliably operating the transmission grid. The Parties also recognize that while the CAISO is a transmission provider under the CAISO Tariff, the CAISO does not own any transmission facilities, and the PTO owns, constructs, and maintains the facilities to which Large Generating Facilities are to be interconnected, and that the PTO may construct or modify facilities to allow the interconnection. While the Parties recognize that the CAISO will be responsible for conducting or causing to be performed Interconnection Studies and similar studies, the PTO will participate in these studies and conduct certain portions of studies, under the direction and oversight of, and approval by, the CAISO, as provided in this Agreement. The CAISO shall not enter into any Interconnection Study agreement with an Interconnection Customer that is contrary to these rights.

**3.2 [INTENTIONALLY LEFT BLANK]**

**3.3 Transmission Owners' Right to Participation in Studies, Committees and Meetings:**

**3.3.1** In the event that an Interconnection Customer proposes to interconnect a Large Generating Facility with the PTO's facilities, or the PTO is an owner of an affected system, the PTO shall have the right to participate in any Interconnection Study or any other study conducted in connection with such request for Interconnection Service. "Participate" in this Section 3.3.1 means physically perform any study or portion thereof in connection with an Interconnection Request, under the direction and oversight of, and approval by, the CAISO pursuant to Section 3.4 of this Agreement; provide or receive input, data or other information regarding any study or portion thereof consistent with Section 3.4 of this Agreement; and, when any study or portion thereof in connection with an Interconnection Request is physically performed by an entity other than the PTO, perform activities necessary to adequately review or validate, as appropriate, any results of the study or portions thereof and provide recommendations.

**3.3.2** In the event that an Interconnection Customer proposes to interconnect a Large Generating Facility with the PTO's facilities, or the PTO is an owner of an affected system, the PTO shall have the right to participate in all meetings expressly established pursuant to the CAISO LGIP. As appropriate, the PTO may participate in all other material or substantive communications in connection with an Interconnection Request.

**3.4** **Interconnection Study Responsibility Allocation:** In complying with its responsibility for conducting or causing to be performed Interconnection Studies, the CAISO will assign responsibility for performance of portions of the Interconnection Studies to the PTO, under the direction and oversight of, and approval by, the CAISO, as set forth in Attachment A, except as specifically qualified as follows:

**3.4.1** For any tasks specifically assigned to the PTO pursuant to Attachment A or otherwise mutually agreed upon by the CAISO and the PTO, the CAISO reserves the right, on a case-by-case basis, to perform or reassign to a mutually agreed upon and pre-qualified contractor such task only where: (a) the quality and accuracy of prior PTO Interconnection Study work product resulting from assigned tasks has been deemed deficient by the CAISO, the CAISO has notified the PTO pursuant to the notice provision of Section 4.16 of this Agreement in writing of the deficiency, and the deficiency has not been cured pursuant to Section 3.4.2 of this Agreement; (b) the timeliness of PTO Interconnection Study work product has been deemed deficient, and either (i) the CAISO has not been notified of the reasons and actions taken to address the timeliness of the work, or (ii) if notified, the stated reasons and actions taken are insufficient or unjustifiable and the PTO has not cured the deficiency pursuant to Section 3.4.2 of this Agreement; (c) the PTO has failed, in a mutually agreed upon timeframe, to provide the CAISO with information or data related to an Interconnection Request despite a written request by the CAISO, pursuant to Section 3.5 hereof, to do so, and such data is the responsibility of the PTO to provide to the CAISO, subject to Section 4.3 of this Agreement; (d) the PTO advises the CAISO in writing that it does not have the resources to adequately or timely perform the task according to the applicable timelines set forth in Attachment A; or (e) the estimated cost of the PTO performing the task has been determined in writing by the CAISO to significantly exceed the cost of the CAISO or mutually agreed upon contractor performing the task, inclusive of the costs that will be incurred by the PTO in exercising its review rights of the results of any such tasks performed by such third party(ies). If the CAISO deviates from the assignments set forth in Attachment A based on the foregoing factors, the CAISO will provide the PTO with a written explanation for the deviation and any

associated reassignments of work. The PTO may contest the deviation pursuant to the Dispute Resolution procedures set forth in Section 4.1 of this Agreement.

Task(s) may only be reassigned in accordance with this Section 3.4.1 where the PTO has been deemed to be deficient in relation to that (those) particular task(s).

**3.4.2 Cure for reassigned Interconnection Study work**

The CAISO shall not reassign task(s) without the opportunity to cure, as specified in Section 3.4.1 of this Agreement. The following actions will serve to cure the deficiencies and result in restoring the assignment(s) as provided in Attachment

A:

- (a) The CAISO and PTO shall negotiate in good faith and agree to a corrective action plan proposed by the PTO, including a reasonably adequate cure period, and the corrective action plan is satisfactorily implemented.
- (b) The CAISO determines the deficiency is cured without an action plan.

**3.4.3** Assessment of prior PTO Interconnection Study work shall only be based on work conducted under the process that becomes effective concurrent with the effective date of this Agreement. Further, assessment of prior PTO Interconnection Study work shall be based on work conducted no earlier than the eighteen (18) month period prior to the date of the CAISO notice of deviation from assignments set forth in Attachment A to this Agreement.

**3.5 Information Exchange:** The PTO shall provide the CAISO, subject to confidentiality requirements in Section 4.3 of this Agreement, with any documentation or data requested by the CAISO reasonably necessary to permit the CAISO to perform, review, validate and approve any Interconnection Study, or portion thereof, performed by the PTO. The CAISO shall provide the PTO with any documentation or data requested by the PTO, subject to confidentiality requirements in Section 4.3 of this Agreement, reasonably necessary to perform, review, and validate any Interconnection Study, or portion thereof.

**3.6 Consistency with Provisions for Centralized Interconnection Study Process:** The CAISO and PTO have determined that the processes and allocation of responsibilities in Section 3.4 of this Agreement ensure that impacts to the CAISO Controlled Grid are independently assessed and that the assignment of responsibilities minimizes handoffs, takes advantage of non-transferable skills, and promotes the efficiency and cost-effectiveness of the centralized Interconnection Study processes, consistent with LGIP Section 3.2.

**3.7 Re-Studies:** If any re-studies are required, the CAISO will confer with the PTO as to the need for a re-study. The CAISO will make the final determination regarding the need for a re-study, subject to dispute resolution procedures.

**3.8 Use of Contractors:** Nothing in this Agreement shall prevent either the CAISO or the PTO from using qualified, mutually agreed upon third party contractors to meet that Party's rights or obligations under this Agreement or the LGIP. To promote the efficiency of the process, the CAISO and PTO will collaborate to identify a list of the mutually agreed to qualified contractors available to the Parties.

**3.9 Performance Standards:** Each Party shall perform all of its obligations under the LGIP, this Agreement, and any FERC approved Interconnection Study procedures that may be adopted by the CAISO to implement the LGIP or this Agreement in accordance with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice.

**3.10 Recovery of Costs:** In accordance with Section 3.5.1 of the LGIP, the PTO shall recover all actual costs from the CAISO incurred in performing Interconnection Studies or portions thereof assigned to it by the CAISO, including all costs incurred in exercising its right to review, and make recommendations on, Interconnection Studies or portions thereof performed by the CAISO and/or contractors under Section 3.8 of this Agreement.

#### **4 GENERAL TERMS AND CONDITIONS.**

**4.1 Dispute Resolution:** In the event any dispute regarding the terms, conditions, and performance of this Agreement is not settled informally, the Parties shall follow the CAISO ADR Procedures set forth in Section 13 of the CAISO Tariff.

**4.2 Liability:** No Party to this Agreement shall be liable to any other Party for any direct, indirect, special, incidental or consequential losses, damages, claims, liabilities, costs or expenses (including attorneys fees and court costs) arising from the performance or non-performance of its obligations under this Agreement regardless of the cause (including intentional action, willful action, gross or ordinary negligence, or force majeure); provided, however, that a Party may seek equitable or other non-monetary relief as may be necessary to enforce this Agreement and that damages for which a Party may be liable to another Party under another agreement will not be considered damages under this Agreement.

**4.3 Confidentiality:** Confidential Information shall be treated in accordance with Section 13.1 of the LGIP.

**4.4 Binding Effect:** This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.

**4.5 Conflicts:** In the event of a conflict between the body of this Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.

**4.6 Rules of Interpretation:** This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section, Attachment, or Appendix means such Article or Section of this Agreement or such Attachment or Appendix to this Agreement, or such Section of the LGIP or such Appendix to the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article or Section; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".



- 4.7 Entire Agreement:** This Agreement, including all Attachments hereto, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, among the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants, which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.
- 4.8 No Third Party Beneficiaries:** This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.
- 4.9 Waiver:** The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party. Any waiver at any time by a Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Any waiver of this Agreement shall, if requested, be provided in writing. Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- 4.10 Headings:** The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.
- 4.11 Multiple Counterparts:** This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 4.12 Modification by the Parties:** The Parties may amend this Agreement and any Appendices to this Agreement only (1) by mutual agreement of the Parties by a written instrument duly executed by the Parties, subject to FERC approval or (2) upon the issuance of a FERC order, pursuant to Section 206 of the Federal Power Act. It is the Parties' intent that FERC's right to change any provision of this Agreement shall be limited to the maximum extent permissible by law and that any such change, if permissible, shall be in accordance with the Mobile-Sierra public interest standard applicable to fixed rate agreements. *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956). Such amendment shall become effective and a part of this Agreement upon satisfaction of all applicable laws and regulations. Notwithstanding the foregoing, Attachment B (Notices) may be modified as set forth in Section 4.15 of this Agreement, and the CAISO and the PTO may from time to time mutually agree to deviate from Attachment A in accordance with the provisions of this Agreement, however, such deviation shall be subject to Section 4.9 of this Agreement and not considered a course of dealing.
- 4.13 No Partnership:** This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.

**4.14 Assignment:** This Agreement may be assigned by a Party only with the written consent of the other Parties; provided that a Party may assign this Agreement without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

**4.15 Notices:** Any notice, demand, or request provided in this Agreement, or served, given, or made in connection with it, will be in writing and deemed properly served, given, or made if delivered in person, transmitted by facsimile, or sent by United States mail, postage prepaid, to the persons specified in Attachment B hereto unless otherwise provided in this Agreement. Any Party may at any time, by notice to all other Parties, change the designation or address of the person specified in Attachment B as the person who receives notices pursuant to this Agreement.

**IN WITNESS WHEREOF,** the Parties have executed this Agreement in multiple originals, each of which shall constitute and be an original effective agreement among the Parties.

**California Independent System Operator Corporation**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[NAME OF PTO]**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## ATTACHMENT A

### INTERCONNECTION STUDY RESPONSIBILITY ALLOCATION

Description of Large Generator Interconnection Process: Roles and Responsibilities of CAISO and PTOs.

**Purpose:** This Attachment A to the “AGREEMENT FOR THE ALLOCATION OF RESPONSIBILITIES WITH REGARD TO LARGE GENERATOR INTERCONNECTION PROCEDURES AND INTERCONNECTION STUDY AGREEMENTS” serves as further clarification of the roles and responsibilities of the parties to this Agreement. The CAISO will assign responsibility for performance of portions of the Interconnection Studies to the relevant PTOs, under the direction and oversight of, and approval by, the CAISO, as set forth in this Attachment A. This document serves as a general overview of only the roles and responsibilities as between the CAISO and PTOs. This Agreement does not include the process steps, involvement or obligations of the Interconnection Customer (IC). This Agreement is not inclusive of all procedures necessary to comply with all provisions of the LGIA, LGIP and Large Generator Interconnection Study Process Agreement.

#### **Interconnection Request (IR) Process**

1. CAISO forwards the IR to the PTO within three (3) Business Days (BD) of receipt of IR from Interconnection Customer (IC)
2. PTO(s) provides any feed back regarding IR to CAISO within 3 BD
3. CAISO distributes draft Scoping Meeting minutes for review within 5 BD of Scoping Meeting.
4. PTO(s) provide any comments to the Scoping Meeting minutes within 2 BD of receipt of draft Scoping Meeting minutes.
5. CAISO issues the final Scoping Meeting minutes within 3 BD of receipt of comments.

## Phase I Interconnection Study Timeline

| <u>Line</u>  | <u>Initial (Phase I) Cluster Study</u>   | <u>Typical Calendar Days</u> | <u>Timeline (Days)</u> |
|--|--|------------------------------|------------------------|
| <u>1</u>   | <u>CAISO and PTOs develop initial Generating Facility groups for initial Dispatch assumptions and cost allocation purposes (except for thermal overload mitigation).</u>   | <u>7</u>                     | <u>1-7</u>             |
| <u>2</u>   | <u>PTOs develop draft Base Cases, each representing all Generating Facilities in the queue cluster, and deliver to CAISO.</u>  | <u>21</u>                    | <u>1-21</u>            |
| <u>3</u>   | <u>PTO develops preferred and alternative, if applicable, direct interconnection plans, including the need for an Interconnection Grid Substation (IGS).</u>   | <u>25</u>                    | <u>22-46</u>           |
| <u>4</u>   | <u>PTO develops draft contingency lists.</u>   | <u>25</u>                    | <u>22-46</u>           |
| <u>5</u>   | <u>CAISO reviews and approves Base Cases and direct interconnection plans and merges them together, as needed.</u><br><u>CAISO updates summer peak Base Cases to reflect withdrawn projects from previous queue cluster study. PTOs update off-peak Base Cases.</u><br><u>CAISO reviews and approves contingency lists. PTO needs time to consider CAISO proposed changes.</u> | <u>21</u>                    | <u>47-67</u>           |
| <u>6</u>   | <u>CAISO provides Deliverability Assessment results identifying constrained facilities, using summer peak Base Cases, and prepares results summary and may propose mitigation plans for PTO review.</u>  | <u>21</u>                    | <u>68-88</u>           |
| <u>7</u>   | <u>At the CAISO's direction, the PTO performs the off-peak Load Flow, and summer peak and off-peak Post Transient and Stability analyses and identifies mitigation solutions, as appropriate, and submits draft study results to CAISO for review and direction.</u>   | <u>21</u>                    | <u>68-88</u>           |
| <u>8</u>   | <u>PTO develops mitigation plans for summer peak and off-peak or supplements CAISO proposed mitigation plans for consideration, as appropriate, and submits to CAISO for review and direction</u>  | <u>21</u>                    | <u>89-109</u>          |
| <u>9</u>   | <u>CAISO retests Deliverability Assessment results with proposed Delivery Network Upgrades and withdrawn projects from previous cluster study removed. PTO reviews and comments on retest results.</u>   | <u>14</u>                    | <u>110-123</u>         |
| <u>10</u>  | <u>CAISO develops shift factors for cost allocation purposes of all Network Upgrades associated with mitigating thermal overloads.</u>   | <u>7</u>                     | <u>124-130</u>         |
| <b><u>Short Circuit Duty (concurrent with the LF/PT/S)</u></b> |  |                              |                        |
| <u>11</u>  | <u>CAISO coordinates with other potentially affected facility owners.<sup>1</sup></u>  | <u>n/a</u>                   | <u>n/a</u>             |
| <u>12</u>  | <u>CAISO directs PTO to develop Base Case and run short circuit analysis.</u>  | <u>21</u>                    | <u>46-66</u>           |
| <u>13</u>  | <u>PTO performs facilities review. (Note: possibly for feedback into the power flow studies and PTO mitigation plans.)</u>   | <u>28</u>                    | <u>67-94</u>           |

<sup>1</sup> In accordance with the WECC Short Circuit Duty Procedure

|  |  |           |                |
|--|--|-----------|----------------|
| <u>14</u>                                    | <u>PTO prepares draft study results and submits to the CAISO for review and direction.</u>   | <u>28</u> | <u>95-123</u>  |
| <b>Facility cost estimates and schedules</b> |  |           |                |
| <u>15</u>                                    | <u>At the CAISO's direction, PTO(s) prepares cost estimates and schedules for the direct assignment facilities and Network Upgrades identified in the power flow, short circuit duty, post transient, and stability studies.</u>   | <u>20</u> | <u>124-143</u> |
| <b>Final Report</b>                          |  |           |                |
| <u>16</u>                                    | <u>At the CAISO's direction, PTO(s) prepares draft report for impacts in its service territory.</u>  | <u>7</u>  | <u>144-150</u> |
| <u>17</u>                                    | <u>CAISO compiles all results into a draft report that covers grid impacts, as appropriate. CAISO reviews integrated draft report and submits comments, recommendations and direction to the PTO.</u>  | <u>9</u>  | <u>151-159</u> |
| <u>18</u>                                    | <u>PTO incorporates CAISO's directions, conclusions and recommendations. If CAISO conclusions and recommendations conflict with PTO conclusions, then CAISO and PTO must coordinate to resolve conflicts. Any remaining conflicts must be noted in the final report.</u> | <u>14</u> | <u>160-173</u> |
| <u>19</u>                                    | <u>PTO submits final draft report to the CAISO. The CAISO will finalize the report and tender the CAISO approved report to the ICs.</u>  |           |                |
| <b>Final Study Report</b>                    |  |           |                |
| <u>20</u>                                    | <u>CAISO provides final approved report to ICs, PTO, and any applicable Affected Systems.</u>  | <u>7</u>  | <u>174-180</u> |

**Phase II Interconnection Study Process\*\***

**\*\*All Interconnection Studies will be under the direction and oversight of, and approval by, the CAISO and may involve more than one PTO.**

| <u>Line</u> | <u>Standard Project Refinement and Facilities Study</u>   | <u>Typical Calendar Days</u> | <u>Timeline (Days)</u> |
|-------------|---|------------------------------|------------------------|
| <u>21</u>   | <u>PTOs update Base Cases from Phase I Interconnection Study line 5 to remove projects that have withdrawn.</u>   | <u>30</u>                    | <u>1-30</u>            |
| <u>22</u>   | <u>CAISO reviews and approves Base Cases.</u>   |                              |                        |
| <u>23</u>   | <u>CAISO and PTOs update studies performed in Phase I lines 6-14 using Base Cases from line 22. Additional alternatives may be considered that address future generation development potential, meet load serving capability, and economic benefit objectives, and phased development and option value of transmission projects to address uncertainty.</u>   | <u>120</u>                   | <u>31-150</u>          |
| <u>23.1</u> | <u>Projects from line 23 requiring CPUC or CAISO Governing Board approval may need to go through the Transmission Planning Process stakeholder process. After completing the stakeholder review process, these projects would proceed through the activities described in lines 24 through 32. Projects not requiring CPUC or CAISO Governing Board approval, or that have already gone through a</u> |                              |                        |

|  |   |           |                 |
|--|---|-----------|-----------------|
|  | <u>stakeholder process, would proceed immediately to the activities described in lines 24 through 32. (See Appendix C of the CAISO's proposal for the generator interconnection process reform.)</u>  |           |                 |
| <u>24</u>                                  | <u>PTOs develop draft off-peak and summer peak operating year Base Cases as appropriate where each case includes all Generating Facilities in Phase II Interconnection Study having the same operating date and deliver to CAISO.</u>   | <u>30</u> | <u>151-180*</u> |
| <u>25</u>                                  | <u>CAISO reviews and approves cases from line 24.</u>   |           |                 |
| <u>26</u>                                  | <u>At the CAISO's direction, the PTOs perform operational studies using cases from line 25 to determine Network Upgrade requirements for each study year and identify any special operational requirements to connect projects in the year of study.</u>  | <u>45</u> | <u>181-225*</u> |
| <u>27</u>                                  | <u>At the CAISO's direction, the PTOs perform additional operational studies to identify the optimal approach for building out the overall plan of service on a segmented (i.e. building block) basis acknowledging that portions of the overall plan of service may be staged in segments over time.</u> | <u>30</u> | <u>226-255*</u> |
| <b><u>Final Plan of Service Report</u></b> |   |           |                 |
| <u>28</u>                                  | <u>At the CAISO's direction, PTO(s) prepares draft plan of service report.</u>  | <u>7</u>  | <u>256-262*</u> |
| <u>29</u>                                  | <u>CAISO reviews draft plan of service report and submits comments, recommendations and direction to the PTO.</u>   | <u>9</u>  | <u>263-271*</u> |
| <u>30</u>                                  | <u>PTO incorporates CAISO directions, conclusions and recommendations. If CAISO conclusions and recommendations conflict with PTO conclusions, then CAISO and PTO must coordinate to resolve conflicts. Any remaining conflicts must be noted in the final report.</u>                                    | <u>14</u> | <u>272-285*</u> |
| <u>31</u>                                  | <u>PTO submits final draft report to the CAISO. The CAISO will finalize the report.</u>   |           |                 |
| <b><u>Facility Costs and Schedules</u></b> |   |           |                 |
| <u>32</u>                                  | <u>At the CAISO's direction, PTO(s) prepares detailed cost estimates and schedules for the direct assignment facilities and Network Upgrades identified in the overall plan of service and including individual segments.</u>   | <u>75</u> | <u>256-330*</u> |

\* For projects going through the Transmission Planning Process as described in Line 23.1, the activities in lines 24 through 32 may be delayed until the Network Upgrade plan is approved through the Transmission Planning Process. However, the subsequent cluster study would proceed on schedule based on the plan of service from line 23.

**ATTACHMENT B**  
**CONTACTS FOR NOTICES**

**[Section 4.15]**

**California ISO**

Manager, Transmission Engineering  
151 Blue Ravine Road  
Folsom, CA 95630  
Phone: 916.351.2104  
Fax: 916.351.2264

**[NAME OF PTO]**

[Address of PTO]

\* \* \*

**Attachment D3 – Blacklines**  
**Generation Interconnection Process Reform Amendment Filing**

**4<sup>th</sup> Replacement MRTU Tariff**



\* \* \*

**CAISO TARIFF APPENDIX Z**

**Large Generator Interconnection Agreement  
for Interconnection Requests in a Queue Cluster Window**

LARGE GENERATOR INTERCONNECTION AGREEMENT (LGIA)

[INTERCONNECTION CUSTOMER]

[PARTICIPATING TO]

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

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## LARGE GENERATOR INTERCONNECTION AGREEMENT

[INTERCONNECTION CUSTOMER]

[PARTICIPATING TO]

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

THIS LARGE GENERATOR INTERCONNECTION AGREEMENT ("LGIA") is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and among \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ ("Interconnection Customer" with a Large Generating Facility), \_\_\_\_\_, a corporation organized and existing under the laws of the State of California ("**Participating TO**"), and **California Independent System Operator Corporation**, a California nonprofit public benefit corporation organized and existing under the laws of the State of California ("CAISO"). Interconnection Customer, Participating TO, and CAISO each may be referred to as a "Party" or collectively as the "Parties."

### RECITALS

WHEREAS, CAISO exercises Operational Control over the CAISO Controlled Grid; and

WHEREAS, the Participating TO owns, operates, and maintains the Participating TO's Transmission System; and

WHEREAS, Interconnection Customer intends to own, lease and/or control and operate the Generating Facility identified as a Large Generating Facility in Appendix C to this LGIA; and

WHEREAS, Interconnection Customer, Participating TO, and CAISO have agreed to enter into this LGIA for the purpose of interconnecting the Large Generating Facility with the Participating TO's Transmission System;

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein, it is agreed:

When used in this LGIA, terms with initial capitalization that are not defined in Article 1 shall have the meanings specified in the Article in which they are used.

### ARTICLE 1. DEFINITIONS

**Adverse System Impact** shall mean the negative effects due to technical or operational limits on conductors or equipment being exceeded that may compromise the safety and reliability of the electric system.

**Affected System** shall mean an electric system other than the CAISO Controlled Grid that may be affected by the proposed interconnection, including the Participating TO's electric system that is not part of the CAISO Controlled Grid.

**Affiliate** shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Council** shall mean the Western Electricity Coordinating Council or its successor.

**Applicable Reliability Standards** shall mean the requirements and guidelines of NERC, the Applicable Reliability Council, and the Balancing Authority Area of the Participating TO's Transmission System to which the Generating Facility is directly interconnected.

**Balancing Authority** shall mean the responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.

**Balancing Authority Area** shall mean the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.

**Base Case** shall mean the base case power flow, short circuit, and stability data bases used for the Interconnection Studies.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of this LGIA.

**Breaching Party** shall mean a Party that is in Breach of this LGIA.

**Business Day** shall mean Monday through Friday, excluding federal holidays and the day after Thanksgiving Day.

**CAISO Controlled Grid** shall mean the system of transmission lines and associated facilities of the parties to the Transmission Control Agreement that have been placed under the CAISO's Operational Control.

**CAISO Tariff** shall mean the CAISO's tariff, as filed with FERC, and as amended or supplemented from time to time, or any successor tariff.

**Calendar Day** shall mean any day including Saturday, Sunday or a federal holiday.

**Commercial Operation** shall mean the status of an Electric Generating Unit or project phase at a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

**Commercial Operation Date** of an Electric Generating Unit or project phase shall mean the date on which the Electric Generating Unit or project phase at the Generating Facility commences Commercial Operation as agreed to by the applicable Participating TO, the CAISO, and the Interconnection Customer pursuant to Appendix E to this LGIA, and in accordance with the implementation plan agreed to by the Participating TO and the CAISO for multiple individual Electric Generating Units or project phases at a Generating Facility where an Interconnection Customer intends to establish separate Commercial Operation Dates for those Electric Generating Units or project phases.

**Confidential Information** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the

information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, subject to Article 22.1.2.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of this LGIA.

**Distribution System** shall mean those non-CAISO-controlled transmission and distribution facilities owned by the Participating TO.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to the Participating TO's Distribution System. Distribution Upgrades do not include Interconnection Facilities.

**Effective Date** shall mean the date on which this LGIA becomes effective upon execution by all Parties subject to acceptance by FERC, or if filed unexecuted, upon the date specified by FERC.

**Electric Generating Unit** shall mean an individual electric generator and its associated plant and apparatus whose electrical output is capable of being separately identified and metered.

**Emergency Condition** shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the CAISO, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the CAISO Controlled Grid or the electric systems of others to which the CAISO Controlled Grid is directly connected; (3) that, in the case of the Participating TO, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Participating TO's Transmission System, Participating TO's Interconnection Facilities, Distribution System, or the electric systems of others to which the Participating TO's electric system is directly connected; or (4) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions; provided, that Interconnection Customer is not obligated by this LGIA to possess black start capability.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**Federal Power Act** shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a et seq.

**FERC** shall mean the Federal Energy Regulatory Commission or its successor.

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**Generating Facility** shall mean the Interconnection Customer's Electric Generating Unit(s) used for the production of electricity identified in the Interconnection Customer's Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Generating Facility Capacity** shall mean the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices.

**Good Utility Practice** shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a

reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be any one of a number of the optimum practices, methods, or acts to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** shall mean any federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, CAISO, Participating TO, or any Affiliate thereof.

**Hazardous Substances** shall mean any chemicals, materials or substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "hazardous constituents," "restricted hazardous materials," "extremely hazardous substances," "toxic substances," "radioactive substances," "contaminants," "pollutants," "toxic pollutants" or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**Initial Synchronization Date** shall mean the date upon which an Electric Generating Unit is initially synchronized and upon which Trial Operation begins.

**In-Service Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Participating TO's Interconnection Facilities to obtain back feed power.

**Interconnection Customer's Interconnection Facilities** shall mean all facilities and equipment, as identified in Appendix A of this LGIA, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Participating TO's Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Participating TO's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Participating TO's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Financial Security** shall have the meaning assigned to it in Section 1.2 of the LGIP.

**Interconnection Handbook** shall mean a handbook, developed by the Participating TO and posted on the Participating TO's web site or otherwise made available by the Participating TO, describing technical and operational requirements for wholesale generators and loads connected to the Participating TO's portion of the CAISO Controlled Grid, as such handbook may be modified or superseded from time to time. Participating TO's standards contained in the Interconnection Handbook shall be deemed consistent with Good Utility Practice and Applicable Reliability Standards. In the event of a conflict between the terms of this LGIA and the terms of the Participating TO's Interconnection Handbook, the terms in this LGIA shall apply.

**Interconnection Request** shall mean a request, in the form of Appendix 1 to the Large Generator Interconnection Procedures, in accordance with the CAISO Tariff.

**Interconnection Service** shall mean the service provided by the Participating TO and CAISO associated with interconnecting the Interconnection Customer's Generating Facility to the Participating TO's Transmission System and enabling the CAISO Controlled Grid to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of this LGIA, the Participating TO's Transmission Owner Tariff, and the CAISO Tariff.

**Interconnection Study** shall mean either of the following studies: the Phase I Interconnection Study or the Phase II Interconnection Study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), pursuant to the Large Generator Interconnection Procedures.

**IRS** shall mean the Internal Revenue Service.

**Large Generating Facility** shall mean a Generating Facility having a Generating Facility Capacity of more than 20 MW.

**Large Generator Interconnection Procedures (LGIP)** shall mean the CAISO protocol that sets forth the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that is included in CAISO Tariff Appendix Y.

**Large Generator Interconnection Study Process Agreement** shall mean the agreement between the Interconnection Customer and the CAISO for the conduct of the Interconnection Studies.

**Loss** shall mean any and all damages, losses, and claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties.

**Material Modification** shall mean those modifications that have a material impact on the cost or timing of any Interconnection Request or any other valid interconnection request with a later queue priority date.

**Metering Equipment** shall mean all metering equipment installed or to be installed for measuring the output of the Generating Facility pursuant to this LGIA at the metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

**NERC** shall mean the North American Electric Reliability Council or its successor organization.

**Network Upgrades** shall be Participating TO's Delivery Network Upgrades and Participating TO's Reliability Network Upgrades.

**Operational Control** shall mean the rights of the CAISO under the Transmission Control Agreement and the CAISO Tariff to direct the parties to the Transmission Control Agreement how to operate their transmission lines and facilities and other electric plant affecting the reliability of those lines and facilities for the purpose of affording comparable non-discriminatory transmission access and meeting applicable reliability criteria.

**Participating TO's Delivery Network Upgrades** shall mean the additions, modifications, and upgrades to the Participating TO's Transmission System at or beyond the Point of Interconnection, other than Reliability Network Upgrades, identified in the Interconnection Studies, as identified in Appendix A, to relieve constraints on the CAISO Controlled Grid.

**Participating TO's Interconnection Facilities** shall mean all facilities and equipment owned, controlled or operated by the Participating TO from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to this LGIA, including any modifications, additions or upgrades to such facilities and equipment. Participating TO's Interconnection Facilities are sole use

facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Participating TO's Reliability Network Upgrades** shall mean the additions, modifications, and upgrades to the Participating TO's Transmission System at or beyond the Point of Interconnection, identified in the Interconnection Studies, as identified in Appendix A, necessary to interconnect the Large Generating Facility safely and reliably to the Participating TO's Transmission System, which would not have been necessary but for the interconnection of the Large Generating Facility, including additions, modifications, and upgrades necessary to remedy short circuit or stability problems resulting from the interconnection of the Large Generating Facility to the Participating TO's Transmission System. Participating TO's Reliability Network Upgrades also include, consistent with Applicable Reliability Standards and Applicable Reliability Council practice, the Participating TO's facilities necessary to mitigate any adverse impact the Large Generating Facility's interconnection may have on a path's Applicable Reliability Council rating. Participating TO's Reliability Network Upgrades do not include any Participating TO's Delivery Network Upgrades.

**Participating TO's Transmission System** shall mean the facilities owned and operated by the Participating TO and that have been placed under the CAISO's Operational Control, which facilities form part of the CAISO Controlled Grid.

**Party or Parties** shall mean the Participating TO, CAISO, Interconnection Customer or the applicable combination of the above.

**Phase I Interconnection Study** shall mean the engineering study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), that evaluates the impact of the proposed interconnection on the safety and reliability of the Participating TO's Transmission System and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility(ies) were interconnected without identified project modifications or system modifications, as provided in the On-Peak Deliverability Assessment (as defined in the CAISO Tariff), and other potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Large Generator Interconnection Procedures. The study will also identify the approximate total costs, based on per unit costs, of mitigating these impacts, along with an equitable allocation of those costs to Interconnection Customers for their individual Generating Facilities.

**Phase II Interconnection Study** shall mean an engineering and operational study conducted or caused to be performed by the CAISO once per calendar year, in coordination with the applicable Participating TO(s), to determine the Point of Interconnection and a list of facilities (including the Participating TO's Interconnection Facilities, Network Upgrades, Distribution Upgrades, and Stand Alone Network Upgrades), the cost of those facilities, and the time required to interconnect the Generating Facility(ies) with the Participating TO's Transmission System.

**Point of Change of Ownership** shall mean the point, as set forth in Appendix A to this LGIA, where the Interconnection Customer's Interconnection Facilities connect to the Participating TO's Interconnection Facilities.

**Point of Interconnection** shall mean the point, as set forth in Appendix A to this LGIA, where the Interconnection Facilities connect to the Participating TO's Transmission System.

**QF PGA** shall mean a Qualifying Facility Participating Generator Agreement specifying the special provisions for the operating relationship between a Qualifying Facility and the CAISO, a pro forma version of which is set forth in Appendix B.3 of the CAISO Tariff.

**Qualifying Facility** shall mean a qualifying cogeneration facility or qualifying small power production facility, as defined in the Code of Federal Regulations, Title 18, Part 292 (18 C.F.R. §292).

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under this LGIA, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Scoping Meeting** shall mean the meeting among representatives of the Interconnection Customer, the Participating TO(s), other Affected Systems, and the CAISO conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

**Stand Alone Network Upgrades** shall mean Network Upgrades that the Interconnection Customer may construct without affecting day-to-day operations of the CAISO Controlled Grid or Affected Systems during their construction. The Participating TO, the CAISO, and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to this LGIA.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, that protects (1) the Participating TO's Transmission System, Participating TO's Interconnection Facilities, CAISO Controlled Grid, and Affected Systems from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the CAISO Controlled Grid, Participating TO's Interconnection Facilities, and Affected Systems or on other delivery systems or other generating systems to which the CAISO Controlled Grid is directly connected.

**Transmission Control Agreement** shall mean CAISO FERC Electric Tariff No. 7.

**Trial Operation** shall mean the period during which the Interconnection Customer is engaged in on-site test operations and commissioning of an Electric Generating Unit prior to Commercial Operation.

## **ARTICLE 2. EFFECTIVE DATE, TERM AND TERMINATION**

**2.1 Effective Date.** This LGIA shall become effective upon execution by all Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by FERC. The CAISO and Participating TO shall promptly file this LGIA with FERC upon execution in accordance with Article 3.1, if required.

**2.2 Term of Agreement.** Subject to the provisions of Article 2.3, this LGIA shall remain in effect for a period of \_\_\_\_\_ years from the Effective Date (Term Specified in Individual Agreements to be ten (10) years or such other longer period as the Interconnection Customer may request) and shall be automatically renewed for each successive one-year period thereafter.

### **2.3 Termination Procedures.**

**2.3.1 Written Notice.** This LGIA may be terminated by the Interconnection Customer after giving the CAISO and the Participating TO ninety (90) Calendar Days advance written notice, or by the CAISO and the Participating TO notifying FERC after the Generating Facility permanently ceases Commercial Operation.

**2.3.2 Default.** A Party may terminate this LGIA in accordance with Article 17.

**2.3.3 Suspension of Work.** This LGIA may be deemed terminated in accordance with Article 5.16.

**2.3.4** Notwithstanding Articles 2.3.1, 2.3.2, and 2.3.3, no termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to

such termination, including the filing with FERC of a notice of termination of this LGIA (if applicable), which notice has been accepted for filing by FERC, and the Interconnection Customer has fulfilled its termination cost obligations under Article 2.4.

**2.4 Termination Costs.** Immediately upon the other Parties' receipt of a notice of the termination of this LGIA pursuant to Article 2.3 above, the CAISO and the Participating TO will determine the total cost responsibility of the Interconnection Customer. If, as of the date of the other Parties' receipt of the notice of termination, the Interconnection Customer has not already paid its share of Network Upgrade costs, as set forth in Appendix G to this LGIA, the Participating TO will liquidate the Interconnection Customer's Interconnection Financial Security associated with its cost responsibility for Network Upgrades, in accordance with Section 9.4 of the LGIP.

The Interconnection Customer will also be responsible for all costs incurred or irrevocably committed to be incurred in association with the construction of the Participating TO's Interconnection Facilities (including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment) and other such expenses, including any Distribution Upgrades for which the Participating TO or CAISO has incurred expenses or has irrevocably committed to incur expenses and has not been reimbursed by the Interconnection Customer, as of the date of the other Parties' receipt of the notice of termination, subject to the limitations set forth in this Article 2.4. Nothing in this Article 2.4 shall limit the Parties' rights under Article 17. If, as of the date of the other Parties' receipt of the notice of termination, the Interconnection Customer has not already reimbursed the Participating TO and the CAISO for costs incurred to construct the Participating TO's Interconnection Facilities, the Participating TO will liquidate the Interconnection Customer's Interconnection Financial Security associated with the construction of the Participating TO's Interconnection Facilities, in accordance with Section 9.4 of the LGIP. If the amount of the Interconnection Financial Security liquidated by the Participating TO under this Article 2.4 is insufficient to compensate the CAISO and the Participating TO for actual costs associated with the construction of the Participating TO's Interconnection Facilities contemplated in this Article, any additional amounts will be the responsibility of the Interconnection Customer, subject to the provisions of Section 9.4 of the LGIP. Any such additional amounts due from the Interconnection Customer beyond the amounts covered by its Interconnection Financial Security will be due to the Participating TO immediately upon termination of this LGIA in accordance with Section 9.4 of the LGIP.

If the amount of the Interconnection Financial Security exceeds the Interconnection Customer's cost responsibility under Section 9.4 of the LGIP, any excess amount will be released to the Interconnection Customer in accordance with Section 9.4 of the LGIP.

**2.4.1** Notwithstanding the foregoing, in the event of termination by a Party, all Parties shall use commercially Reasonable Efforts to mitigate the costs, damages and charges arising as a consequence of termination. With respect to any portion of the Participating TO's Interconnection Facilities that have not yet been constructed or installed, the Participating TO shall to the extent possible and with the Interconnection Customer's authorization cancel any pending orders of, or return, any materials or equipment for, or contracts for construction of, such facilities; provided that in the event the Interconnection Customer elects not to authorize such cancellation, the Interconnection Customer shall assume all payment obligations with respect to such materials, equipment, and contracts, and the Participating TO shall deliver such material and equipment, and, if necessary, assign such contracts, to the Interconnection Customer as soon as practicable, at the Interconnection Customer's expense. To the extent that the Interconnection Customer has already paid the Participating TO for any or all such costs of materials or equipment not taken by the Interconnection Customer, the Participating TO shall promptly refund such amounts to the Interconnection Customer, less any costs, including penalties, incurred by the Participating TO to cancel any pending orders of or return such materials, equipment, or contracts.



- 2.4.2** The Participating TO may, at its option, retain any portion of such materials, equipment, or facilities that the Interconnection Customer chooses not to accept delivery of, in which case the Participating TO shall be responsible for all costs associated with procuring such materials, equipment, or facilities.
- 2.4.3** With respect to any portion of the Interconnection Facilities, and any other facilities already installed or constructed pursuant to the terms of this LGIA, Interconnection Customer shall be responsible for all costs associated with the removal, relocation or other disposition or retirement of such materials, equipment, or facilities.
- 2.5** **Disconnection.** Upon termination of this LGIA, the Parties will take all appropriate steps to disconnect the Large Generating Facility from the Participating TO's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this LGIA or such non-terminating Party otherwise is responsible for these costs under this LGIA.
- 2.6** **Survival.** This LGIA shall continue in effect after termination to the extent necessary to provide for final billings and payments and for costs incurred hereunder, including billings and payments pursuant to this LGIA; to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this LGIA was in effect; and to permit each Party to have access to the lands of the other Parties pursuant to this LGIA or other applicable agreements, to disconnect, remove or salvage its own facilities and equipment.

### **ARTICLE 3. REGULATORY FILINGS AND CAISO TARIFF COMPLIANCE**

- 3.1** **Filing.** The Participating TO and the CAISO shall file this LGIA (and any amendment hereto) with the appropriate Governmental Authority(ies), if required. The Interconnection Customer may request that any information so provided be subject to the confidentiality provisions of Article 22. If the Interconnection Customer has executed this LGIA, or any amendment thereto, the Interconnection Customer shall reasonably cooperate with the Participating TO and CAISO with respect to such filing and to provide any information reasonably requested by the Participating TO or CAISO needed to comply with applicable regulatory requirements.
- 3.2** **Agreement Subject to CAISO Tariff.** The Interconnection Customer will comply with all applicable provisions of the CAISO Tariff, including the LGIP.
- 3.3** **Relationship Between this LGIA and the CAISO Tariff.** With regard to rights and obligations between the Participating TO and the Interconnection Customer, if and to the extent a matter is specifically addressed by a provision of this LGIA (including any appendices, schedules or other attachments to this LGIA), the provisions of this LGIA shall govern. If and to the extent a provision of this LGIA is inconsistent with the CAISO Tariff and dictates rights and obligations between the CAISO and the Participating TO or the CAISO and the Interconnection Customer, the CAISO Tariff shall govern.
- 3.4** **Relationship Between this LGIA and the QF PGA.** With regard to the rights and obligations of a Qualifying Facility that has entered into a QF PGA with the CAISO and has entered into this LGIA, if and to the extent a matter is specifically addressed by a provision of the QF PGA that is inconsistent with this LGIA, the terms of the QF PGA shall govern.

### **ARTICLE 4. SCOPE OF SERVICE**

- 4.1** **Interconnection Service.** Interconnection Service allows the Interconnection Customer to connect the Large Generating Facility to the Participating TO's Transmission System and be eligible to deliver the Large Generating Facility's output using the available capacity of the CAISO

Controlled Grid. To the extent the Interconnection Customer wants to receive Interconnection Service, the Participating TO shall construct facilities identified in Appendices A and C that the Participating TO is responsible to construct.

Interconnection Service does not necessarily provide the Interconnection Customer with the capability to physically deliver the output of its Large Generating Facility to any particular load on the CAISO Controlled Grid without incurring congestion costs. In the event of transmission constraints on the CAISO Controlled Grid, the Interconnection Customer's Large Generating Facility shall be subject to the applicable congestion management procedures in the CAISO Tariff in the same manner as all other resources.

**4.2** **Provision of Service.** The Participating TO and the CAISO shall provide Interconnection Service for the Large Generating Facility.

**4.3** **Performance Standards.** Each Party shall perform all of its obligations under this LGIA in accordance with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice, and to the extent a Party is required or prevented or limited in taking any action by such regulations and standards, such Party shall not be deemed to be in Breach of this LGIA for its compliance therewith. If such Party is the CAISO or Participating TO, then that Party shall amend the LGIA and submit the amendment to FERC for approval.

**4.4** **No Transmission Service.** The execution of this LGIA does not constitute a request for, nor the provision of, any transmission service under the CAISO Tariff, and does not convey any right to deliver electricity to any specific customer or point of delivery.

**4.5** **Interconnection Customer Provided Services.** The services provided by Interconnection Customer under this LGIA are set forth in Article 9.6 and Article 13.5.1. Interconnection Customer shall be paid for such services in accordance with Article 11.6.

## **ARTICLE 5. INTERCONNECTION FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION**

Interconnection Facilities, Network Upgrades, and Distribution Upgrades shall be studied, designed, and constructed pursuant to Good Utility Practice. Such studies, design and construction shall be based on the assumed accuracy and completeness of all technical information received by the Participating TO and the CAISO from the Interconnection Customer associated with interconnecting the Large Generating Facility.

**5.1** **Options.** Unless otherwise mutually agreed among the Parties, the Interconnection Customer shall select the In-Service Date, Initial Synchronization Date, and Commercial Operation Date; and either Standard Option or Alternate Option set forth below for completion of the Participating TO's Interconnection Facilities and Network Upgrades as set forth in Appendix A, Interconnection Facilities, Network Upgrades, and Distribution Upgrades, and such dates and selected option shall be set forth in Appendix B, Milestones.

**5.1.1** **Standard Option.** The Participating TO shall design, procure, and construct the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, using Reasonable Efforts to complete the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades by the dates set forth in Appendix B, Milestones. The Participating TO shall not be required to undertake any action which is inconsistent with its standard safety practices, its material and equipment specifications, its design criteria and construction procedures, its labor agreements, and Applicable Laws and Regulations. In the event the Participating TO reasonably expects that it will not be able to complete the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades by the specified dates, the Participating

TO shall promptly provide written notice to the Interconnection Customer and the CAISO and shall undertake Reasonable Efforts to meet the earliest dates thereafter.

**5.1.2 Alternate Option.** If the dates designated by the Interconnection Customer are acceptable to the Participating TO, the Participating TO shall so notify the Interconnection Customer within thirty (30) Calendar Days, and shall assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities by the designated dates.

If the Participating TO subsequently fails to complete the Participating TO's Interconnection Facilities by the In-Service Date, to the extent necessary to provide back feed power; or fails to complete Network Upgrades by the Initial Synchronization Date to the extent necessary to allow for Trial Operation at full power output, unless other arrangements are made by the Parties for such Trial Operation; or fails to complete the Network Upgrades by the Commercial Operation Date, as such dates are reflected in Appendix B, Milestones; the Participating TO shall pay the Interconnection Customer liquidated damages in accordance with Article 5.3, Liquidated Damages, provided, however, the dates designated by the Interconnection Customer shall be extended day for day for each day that the CAISO refuses to grant clearances to install equipment.

**5.1.3 Option to Build.** If the dates designated by the Interconnection Customer are not acceptable to the Participating TO, the Participating TO shall so notify the Interconnection Customer within thirty (30) Calendar Days, and unless the Parties agree otherwise, the Interconnection Customer shall have the option to assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades. If the Interconnection Customer elects to exercise its option to assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, it shall so notify the Participating TO within thirty (30) Calendar Days of receipt of the Participating TO's notification that the designated dates are not acceptable to the Participating TO. The Participating TO, CAISO, and Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Appendix A to this LGIA. Except for Stand Alone Network Upgrades, the Interconnection Customer shall have no right to construct Network Upgrades under this option.

**5.1.4 Negotiated Option.** If the Interconnection Customer elects not to exercise its option under Article 5.1.3, Option to Build, the Interconnection Customer shall so notify the Participating TO within thirty (30) Calendar Days of receipt of the Participating TO's notification that the designated dates are not acceptable to the Participating TO, and the Parties shall in good faith attempt to negotiate terms and conditions (including revision of the specified dates and liquidated damages, the provision of incentives or the procurement and construction of a portion of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades by the Interconnection Customer) pursuant to which the Participating TO is responsible for the design, procurement and construction of the Participating TO's Interconnection Facilities and Network Upgrades. If the Parties are unable to reach agreement on such terms and conditions, the Participating TO shall assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Network Upgrades pursuant to Article 5.1.1, Standard Option.

**5.2 General Conditions Applicable to Option to Build.** If the Interconnection Customer assumes responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades,

(1) the Interconnection Customer shall engineer, procure equipment, and construct the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by the Participating TO;

(2) The Interconnection Customer's engineering, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law to which the Participating TO would be subject in the engineering, procurement or construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

(3) the Participating TO shall review, and the Interconnection Customer shall obtain the Participating TO's approval of, the engineering design, equipment acceptance tests, and the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, which approval shall not be unreasonably withheld, and the CAISO may, at its option, review the engineering design, equipment acceptance tests, and the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

(4) prior to commencement of construction, the Interconnection Customer shall provide to the Participating TO, with a copy to the CAISO for informational purposes, a schedule for construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, and shall promptly respond to requests for information from the Participating TO;

(5) at any time during construction, the Participating TO shall have the right to gain unrestricted access to the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;

(6) at any time during construction, should any phase of the engineering, equipment procurement, or construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by the Participating TO, the Interconnection Customer shall be obligated to remedy deficiencies in that portion of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

(7) the Interconnection Customer shall indemnify the CAISO and Participating TO for claims arising from the Interconnection Customer's construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to Article 18.1 Indemnity;

(8) The Interconnection Customer shall transfer control of the Participating TO's Interconnection Facilities to the Participating TO and shall transfer Operational Control of Stand Alone Network Upgrades to the CAISO;

(9) Unless the Parties otherwise agree, the Interconnection Customer shall transfer ownership of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the Participating TO. As soon as reasonably practicable, but within twelve months after completion of the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, the Interconnection Customer shall provide an invoice of the final cost of the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the Participating TO, which invoice shall set forth such costs in sufficient detail to enable the Participating TO to reflect the proper costs of such facilities in its transmission rate base and to identify the investment upon which refunds will be provided;

(10) the Participating TO shall accept for operation and maintenance the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2; and

(11) The Interconnection Customer's engineering, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of the "Option to Build" conditions set forth in Appendix C. Interconnection Customer shall deliver to the Participating TO "as-built" drawings, information, and any other documents that are reasonably required by the Participating TO to assure that the Interconnection Facilities and Stand-Alone Network Upgrades are built to the standards and specifications required by the Participating TO.

**5.3 Liquidated Damages.** The actual damages to the Interconnection Customer, in the event the Participating TO's Interconnection Facilities or Network Upgrades are not completed by the dates designated by the Interconnection Customer and accepted by the Participating TO pursuant to subparagraphs 5.1.2 or 5.1.4, above, may include Interconnection Customer's fixed operation and maintenance costs and lost opportunity costs. Such actual damages are uncertain and impossible to determine at this time. Because of such uncertainty, any liquidated damages paid by the Participating TO to the Interconnection Customer in the event that the Participating TO does not complete any portion of the Participating TO's Interconnection Facilities or Network Upgrades by the applicable dates, shall be an amount equal to ½ of 1 percent per day of the actual cost of the Participating TO's Interconnection Facilities and Network Upgrades, in the aggregate, for which the Participating TO has assumed responsibility to design, procure and construct.

However, in no event shall the total liquidated damages exceed 20 percent of the actual cost of the Participating TO's Interconnection Facilities and Network Upgrades for which the Participating TO has assumed responsibility to design, procure, and construct. The foregoing payments will be made by the Participating TO to the Interconnection Customer as just compensation for the damages caused to the Interconnection Customer, which actual damages are uncertain and impossible to determine at this time, and as reasonable liquidated damages, but not as a penalty or a method to secure performance of this LGIA. Liquidated damages, when the Parties agree to them, are the exclusive remedy for the Participating TO's failure to meet its schedule.

No liquidated damages shall be paid to the Interconnection Customer if: (1) the Interconnection Customer is not ready to commence use of the Participating TO's Interconnection Facilities or Network Upgrades to take the delivery of power for the Electric Generating Unit's Trial Operation or to export power from the Electric Generating Unit on the specified dates, unless the Interconnection Customer would have been able to commence use of the Participating TO's Interconnection Facilities or Network Upgrades to take the delivery of power for Electric Generating Unit's Trial Operation or to export power from the Electric Generating Unit, but for the Participating TO's delay; (2) the Participating TO's failure to meet the specified dates is the result of the action or inaction of the Interconnection Customer or any other interconnection customer who has entered into an interconnection agreement with the CAISO and/or Participating TO, action or inaction by the CAISO, or any cause beyond the Participating TO's reasonable control or reasonable ability to cure; (3) the Interconnection Customer has assumed responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades; or (4) the Parties have otherwise agreed.

In no event shall the CAISO have any responsibility or liability to the Interconnection Customer for liquidated damages pursuant to the provisions of this Article 5.3.

**5.4 Power System Stabilizers.** The Interconnection Customer shall procure, install, maintain and operate Power System Stabilizers in accordance with Applicable Reliability Standards, the guidelines and procedures established by the Applicable Reliability Council, and the provisions of Section 4.6.5.1 of the CAISO Tariff. The CAISO reserves the right to establish reasonable

minimum acceptable settings for any installed Power System Stabilizers, subject to the design and operating limitations of the Large Generating Facility. If the Large Generating Facility's Power System Stabilizers are removed from service or not capable of automatic operation, the Interconnection Customer shall immediately notify the CAISO and the Participating TO and restore the Power System Stabilizers to operation as soon as possible. The CAISO shall have the right to order the reduction in output or disconnection of the Large Generating Facility if the reliability of the CAISO Controlled Grid would be adversely affected as a result of improperly tuned Power System Stabilizers. The requirements of this Article 5.4 shall not apply to wind generators of the induction type.

**5.5 Equipment Procurement.** If responsibility for construction of the Participating TO's Interconnection Facilities or Network Upgrades is to be borne by the Participating TO, then the Participating TO shall commence design of the Participating TO's Interconnection Facilities or Network Upgrades and procure necessary equipment as soon as practicable after all of the following conditions are satisfied, unless the Parties otherwise agree in writing:

**5.5.1** The CAISO, in coordination with the applicable Participating TO(s), has completed the Phase II Interconnection Study pursuant to the Large Generator Interconnection Facilities Study Process Agreement;

**5.5.2** The Participating TO has received written authorization to proceed with design and procurement from the Interconnection Customer by the date specified in Appendix B, Milestones; and

**5.5.3** The Interconnection Customer has provided security to the Participating TO in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.

**5.6 Construction Commencement.** The Participating TO shall commence construction of the Participating TO's Interconnection Facilities and Network Upgrades for which it is responsible as soon as practicable after the following additional conditions are satisfied:

**5.6.1** Approval of the appropriate Governmental Authority has been obtained for any facilities requiring regulatory approval;

**5.6.2** Necessary real property rights and rights-of-way have been obtained, to the extent required for the construction of a discrete aspect of the Participating TO's Interconnection Facilities and Network Upgrades;

**5.6.3** The Participating TO has received written authorization to proceed with construction from the Interconnection Customer by the date specified in Appendix B, Milestones; and

**5.6.4** The Interconnection Customer has provided payment and security to the Participating TO in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.

**5.7 Work Progress.** The Parties will keep each other advised periodically as to the progress of their respective design, procurement and construction efforts. Any Party may, at any time, request a progress report from another Party. If, at any time, the Interconnection Customer determines that the completion of the Participating TO's Interconnection Facilities will not be required until after the specified In-Service Date, the Interconnection Customer will provide written notice to the Participating TO and CAISO of such later date upon which the completion of the Participating TO's Interconnection Facilities will be required.

**5.8 Information Exchange.** As soon as reasonably practicable after the Effective Date, the Parties shall exchange information regarding the design and compatibility of the Interconnection Customer's Interconnection Facilities and Participating TO's Interconnection Facilities and

compatibility of the Interconnection Facilities with the Participating TO's Transmission System, and shall work diligently and in good faith to make any necessary design changes.

**5.9 Limited Operation.** If any of the Participating TO's Interconnection Facilities or Network Upgrades are not reasonably expected to be completed prior to the Commercial Operation Date of the Electric Generating Unit, the Participating TO and/or CAISO, as applicable, shall, upon the request and at the expense of the Interconnection Customer, perform operating studies on a timely basis to determine the extent to which the Electric Generating Unit and the Interconnection Customer's Interconnection Facilities may operate prior to the completion of the Participating TO's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and this LGIA. The Participating TO and CAISO shall permit Interconnection Customer to operate the Electric Generating Unit and the Interconnection Customer's Interconnection Facilities in accordance with the results of such studies.

**5.10 Interconnection Customer's Interconnection Facilities.** The Interconnection Customer shall, at its expense, design, procure, construct, own and install the Interconnection Customer's Interconnection Facilities, as set forth in Appendix A.

**5.10.1 Large Generating Facility and Interconnection Customer's Interconnection**

**Facilities Specifications.** In addition to the Interconnection Customer's responsibility to submit technical data with its Interconnection Request as required by Section 3.5.1 of the LGIP, the Interconnection Customer shall submit all remaining necessary specifications for the Interconnection Customer's Interconnection Facilities and Large Generating Facility, including System Protection Facilities, to the Participating TO and the CAISO at least one hundred eighty (180) Calendar Days prior to the Initial Synchronization Date; and final specifications for review and comment at least ninety (90) Calendar Days prior to the Initial Synchronization Date. The Participating TO and the CAISO shall review such specifications pursuant to this LGIA and the LGIP to ensure that the Interconnection Customer's Interconnection Facilities and Large Generating Facility are compatible with the technical specifications, operational control, safety requirements, and any other applicable requirements of the Participating TO and the CAISO and comment on such specifications within thirty (30) Calendar Days of the Interconnection Customer's submission. All specifications provided hereunder shall be deemed confidential.

**5.10.2 Participating TO's and CAISO's Review.** The Participating TO's and the CAISO's review of the Interconnection Customer's final specifications shall not be construed as confirming, endorsing, or providing a warranty as to the design, fitness, safety, durability or reliability of the Large Generating Facility, or the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall make such changes to the Interconnection Customer's Interconnection Facilities as may reasonably be required by the Participating TO or the CAISO, in accordance with Good Utility Practice, to ensure that the Interconnection Customer's Interconnection Facilities are compatible with the technical specifications, Operational Control, and safety requirements of the Participating TO or the CAISO.

**5.10.3 Interconnection Customer's Interconnection Facilities Construction.** The Interconnection Customer's Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Participating TO and Interconnection Customer agree on another mutually acceptable deadline, the Interconnection Customer shall deliver to the Participating TO and CAISO "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities and the Electric Generating Unit(s), such as: a one-line diagram, a site plan showing the Large Generating Facility and the Interconnection Customer's Interconnection Facilities, plan and elevation drawings showing the layout of the

Interconnection Customer's Interconnection Facilities, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with the Interconnection Customer's step-up transformers, the facilities connecting the Large Generating Facility to the step-up transformers and the Interconnection Customer's Interconnection Facilities, and the impedances (determined by factory tests) for the associated step-up transformers and the Electric Generating Units. The Interconnection Customer shall provide the Participating TO and the CAISO specifications for the excitation system, automatic voltage regulator, Large Generating Facility control and protection settings, transformer tap settings, and communications, if applicable. Any deviations from the relay settings, machine specifications, and other specifications originally submitted by the Interconnection Customer shall be assessed by the Participating TO and the CAISO pursuant to the appropriate provisions of this LGIA and the LGIP.

**5.10.4 Interconnection Customer to Meet Requirements of the Participating TO's Interconnection Handbook.** The Interconnection Customer shall comply with the Participating TO's Interconnection Handbook.

**5.11 Participating TO's Interconnection Facilities Construction.** The Participating TO's Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Upon request, within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Participating TO and Interconnection Customer agree on another mutually acceptable deadline, the Participating TO shall deliver to the Interconnection Customer and the CAISO the following "as-built" drawings, information and documents for the Participating TO's Interconnection Facilities [include appropriate drawings and relay diagrams].

The Participating TO will obtain control for operating and maintenance purposes of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades upon completion of such facilities. Pursuant to Article 5.2, the CAISO will obtain Operational Control of the Stand Alone Network Upgrades prior to the Commercial Operation Date.

**5.12 Access Rights.** Upon reasonable notice and supervision by a Party, and subject to any required or necessary regulatory approvals, a Party ("Granting Party") shall furnish at no cost to the other Party ("Access Party") any rights of use, licenses, rights of way and easements with respect to lands owned or controlled by the Granting Party, its agents (if allowed under the applicable agency agreement), or any Affiliate, that are necessary to enable the Access Party to obtain ingress and egress to construct, operate, maintain, repair, test (or witness testing), inspect, replace or remove facilities and equipment to: (i) interconnect the Large Generating Facility with the Participating TO's Transmission System; (ii) operate and maintain the Large Generating Facility, the Interconnection Facilities and the Participating TO's Transmission System; and (iii) disconnect or remove the Access Party's facilities and equipment upon termination of this LGIA. In exercising such licenses, rights of way and easements, the Access Party shall not unreasonably disrupt or interfere with normal operation of the Granting Party's business and shall adhere to the safety rules and procedures established in advance, as may be changed from time to time, by the Granting Party and provided to the Access Party.

**5.13 Lands of Other Property Owners.** If any part of the Participating TO's Interconnection Facilities and/or Network Upgrades are to be installed on property owned by persons other than the Interconnection Customer or Participating TO, the Participating TO shall at the Interconnection Customer's expense use efforts, similar in nature and extent to those that it typically undertakes on its own behalf or on behalf of its Affiliates, including use of its eminent domain authority, and to the extent consistent with state law, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove the Participating TO's Interconnection Facilities and/or Network Upgrades upon such property.



**5.14 Permits.** Participating TO and Interconnection Customer shall cooperate with each other in good faith in obtaining all permits, licenses and authorization that are necessary to accomplish the interconnection in compliance with Applicable Laws and Regulations. With respect to this paragraph, the Participating TO shall provide permitting assistance to the Interconnection Customer comparable to that provided to the Participating TO's own, or an Affiliate's generation.

**5.15 Early Construction of Base Case Facilities.** The Interconnection Customer may request the Participating TO to construct, and the Participating TO shall construct, using Reasonable Efforts to accommodate Interconnection Customer's In-Service Date, all or any portion of any Network Upgrades required for Interconnection Customer to be interconnected to the Participating TO's Transmission System which are included in the Base Case of the Interconnection Studies for the Interconnection Customer, and which also are required to be constructed for another interconnection customer, but where such construction is not scheduled to be completed in time to achieve Interconnection Customer's In-Service Date.

**5.16 Suspension.** The Interconnection Customer reserves the right, upon written notice to the Participating TO and the CAISO, to suspend at any time all work associated with the construction and installation of the Participating TO's Interconnection Facilities, Network Upgrades, and/or Distribution Upgrades required under this LGIA, other than Network Upgrades identified in the Phase II Interconnection Study as common to multiple Generating Facilities, with the condition that the Participating TO's electrical system and the CAISO Controlled Grid shall be left in a safe and reliable condition in accordance with Good Utility Practice and the Participating TO's safety and reliability criteria and the CAISO's Applicable Reliability Standards. In such event, the Interconnection Customer shall be responsible for all reasonable and necessary costs which the Participating TO (i) has incurred pursuant to this LGIA prior to the suspension and (ii) incurs in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Participating TO's electric system during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and labor contracts which the Participating TO cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, the Participating TO shall obtain Interconnection Customer's authorization to do so.

The Participating TO shall invoice the Interconnection Customer for such costs pursuant to Article 12 and shall use due diligence to minimize its costs. In the event Interconnection Customer suspends work required under this LGIA pursuant to this Article 5.16, and has not requested the Participating TO to recommence the work or has not itself recommenced work required under this LGIA in time to ensure that the new projected Commercial Operation Date for the full Generating Facility Capacity of the Large Generating Facility is no more than three (3) years from the Commercial Operation Date identified in Appendix B hereto, this LGIA shall be deemed terminated and the Interconnection Customer's responsibility for costs will be determined in accordance with Section 2.4 of this LGIA. The suspension period shall begin on the date the suspension is requested, or the date of the written notice to the Participating TO and the CAISO, if no effective date is specified.

**5.17 Taxes.**

**5.17.1 Interconnection Customer Payments Not Taxable.** The Parties intend that all payments or property transfers made by the Interconnection Customer to the Participating TO for the installation of the Participating TO's Interconnection Facilities and the Network Upgrades shall be non-taxable, either as contributions to capital, or as a refundable advance, in accordance with the Internal Revenue Code and any applicable state income tax laws and shall not be taxable as contributions in aid of construction or otherwise under the Internal Revenue Code and any applicable state income tax laws.

**5.17.2 Representations And Covenants.** In accordance with IRS Notice 2001-82 and IRS Notice 88-129, the Interconnection Customer represents and covenants that (i) ownership of the electricity generated at the Large Generating Facility will pass to another party prior to the transmission of the electricity on the CAISO Controlled Grid, (ii) for income tax purposes, the amount of any payments and the cost of any property transferred to the Participating TO for the Participating TO's Interconnection Facilities will be capitalized by the Interconnection Customer as an intangible asset and recovered using the straight-line method over a useful life of twenty (20) years, and (iii) any portion of the Participating TO's Interconnection Facilities that is a "dual-use intertie," within the meaning of IRS Notice 88-129, is reasonably expected to carry only a de minimis amount of electricity in the direction of the Large Generating Facility. For this purpose, "de minimis amount" means no more than 5 percent of the total power flows in both directions, calculated in accordance with the "5 percent test" set forth in IRS Notice 88-129. This is not intended to be an exclusive list of the relevant conditions that must be met to conform to IRS requirements for non-taxable treatment.

At the Participating TO's request, the Interconnection Customer shall provide the Participating TO with a report from an independent engineer confirming its representation in clause (iii), above. The Participating TO represents and covenants that the cost of the Participating TO's Interconnection Facilities paid for by the Interconnection Customer without the possibility of refund or credit will have no net effect on the base upon which rates are determined.

**5.17.3 Indemnification for the Cost Consequence of Current Tax Liability Imposed Upon the Participating TO.** Notwithstanding Article 5.17.1, the Interconnection Customer shall protect, indemnify and hold harmless the Participating TO from the cost consequences of any current tax liability imposed against the Participating TO as the result of payments or property transfers made by the Interconnection Customer to the Participating TO under this LGIA for Interconnection Facilities, as well as any interest and penalties, other than interest and penalties attributable to any delay caused by the Participating TO.

The Participating TO shall not include a gross-up for the cost consequences of any current tax liability in the amounts it charges the Interconnection Customer under this LGIA unless (i) the Participating TO has determined, in good faith, that the payments or property transfers made by the Interconnection Customer to the Participating TO should be reported as income subject to taxation or (ii) any Governmental Authority directs the Participating TO to report payments or property as income subject to taxation; provided, however, that the Participating TO may require the Interconnection Customer to provide security for Interconnection Facilities, in a form reasonably acceptable to the Participating TO (such as a parental guarantee or a letter of credit), in an amount equal to the cost consequences of any current tax liability under this Article 5.17. The Interconnection Customer shall reimburse the Participating TO for such costs on a fully grossed-up basis, in accordance with Article 5.17.4, within thirty (30) Calendar Days of receiving written notification from the Participating TO of the amount due, including detail about how the amount was calculated.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten year testing period and the applicable statute of limitation, as it may be extended by the Participating TO upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event and the payment of any related indemnification obligations as contemplated by this Article 5.17.

**5.17.4 Tax Gross-Up Amount.** The Interconnection Customer's liability for the cost consequences of any current tax liability under this Article 5.17 shall be calculated on a fully grossed-up basis. Except as may otherwise be agreed to by the parties, this means that the Interconnection Customer will pay the Participating TO, in addition to the amount

paid for the Interconnection Facilities and Network Upgrades, an amount equal to (1) the current taxes imposed on the Participating TO ("Current Taxes") on the excess of (a) the gross income realized by the Participating TO as a result of payments or property transfers made by the Interconnection Customer to the Participating TO under this LGIA (without regard to any payments under this Article 5.17) (the "Gross Income Amount") over (b) the present value of future tax deductions for depreciation that will be available as a result of such payments or property transfers (the "Present Value Depreciation Amount"), plus (2) an additional amount sufficient to permit the Participating TO to receive and retain, after the payment of all Current Taxes, an amount equal to the net amount described in clause (1).

For this purpose, (i) Current Taxes shall be computed based on the Participating TO's composite federal and state tax rates at the time the payments or property transfers are received and the Participating TO will be treated as being subject to tax at the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting the Participating TO's anticipated tax depreciation deductions as a result of such payments or property transfers by the Participating TO's current weighted average cost of capital. Thus, the formula for calculating the Interconnection Customer's liability to the Participating TO pursuant to this Article 5.17.4 can be expressed as follows:  $(\text{Current Tax Rate} \times (\text{Gross Income Amount} - \text{Present Value of Tax Depreciation})) / (1 - \text{Current Tax Rate})$ . Interconnection Customer's estimated tax liability in the event taxes are imposed shall be stated in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades.

**5.17.5 Private Letter Ruling or Change or Clarification of Law.** At the Interconnection Customer's request and expense, the Participating TO shall file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by the Interconnection Customer to the Participating TO under this LGIA are subject to federal income taxation. The Interconnection Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of the Interconnection Customer's knowledge. The Participating TO and Interconnection Customer shall cooperate in good faith with respect to the submission of such request, provided, however, the Interconnection Customer and the Participating TO explicitly acknowledge (and nothing herein is intended to alter) Participating TO's obligation under law to certify that the facts presented in the ruling request are true, correct and complete.

The Participating TO shall keep the Interconnection Customer fully informed of the status of such request for a private letter ruling and shall execute either a privacy act waiver or a limited power of attorney, in a form acceptable to the IRS, that authorizes the Interconnection Customer to participate in all discussions with the IRS regarding such request for a private letter ruling. The Participating TO shall allow the Interconnection Customer to attend all meetings with IRS officials about the request and shall permit the Interconnection Customer to prepare the initial drafts of any follow-up letters in connection with the request.

**5.17.6 Subsequent Taxable Events.** If, within 10 years from the date on which the relevant Participating TO's Interconnection Facilities are placed in service, (i) the Interconnection Customer Breaches the covenants contained in Article 5.17.2, (ii) a "disqualification event" occurs within the meaning of IRS Notice 88-129, or (iii) this LGIA terminates and the Participating TO retains ownership of the Interconnection Facilities and Network Upgrades, the Interconnection Customer shall pay a tax gross-up for the cost consequences of any current tax liability imposed on the Participating TO, calculated using the methodology described in Article 5.17.4 and in accordance with IRS Notice 90-60.

**5.17.7 Contests.** In the event any Governmental Authority determines that the Participating TO's receipt of payments or property constitutes income that is subject to taxation, the Participating TO shall notify the Interconnection Customer, in writing, within thirty (30) Calendar Days of receiving notification of such determination by a Governmental Authority. Upon the timely written request by the Interconnection Customer and at the Interconnection Customer's sole expense, the Participating TO may appeal, protest, seek abatement of, or otherwise oppose such determination. Upon the Interconnection Customer's written request and sole expense, the Participating TO may file a claim for refund with respect to any taxes paid under this Article 5.17, whether or not it has received such a determination. The Participating TO reserve the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the selection of counsel and compromise or settlement of the claim, but the Participating TO shall keep the Interconnection Customer informed, shall consider in good faith suggestions from the Interconnection Customer about the conduct of the contest, and shall reasonably permit the Interconnection Customer or an Interconnection Customer representative to attend contest proceedings.

The Interconnection Customer shall pay to the Participating TO on a periodic basis, as invoiced by the Participating TO, the Participating TO's documented reasonable costs of prosecuting such appeal, protest, abatement or other contest, including any costs associated with obtaining the opinion of independent tax counsel described in this Article 5.17.7. The Participating TO may abandon any contest if the Interconnection Customer fails to provide payment to the Participating TO within thirty (30) Calendar Days of receiving such invoice.

At any time during the contest, the Participating TO may agree to a settlement either with the Interconnection Customer's consent or, if such consent is refused, after obtaining written advice from independent nationally-recognized tax counsel, selected by the Participating TO, but reasonably acceptable to the Interconnection Customer, that the proposed settlement represents a reasonable settlement given the hazards of litigation. The Interconnection Customer's obligation shall be based on the amount of the settlement agreed to by the Interconnection Customer, or if a higher amount, so much of the settlement that is supported by the written advice from nationally-recognized tax counsel selected under the terms of the preceding paragraph. The settlement amount shall be calculated on a fully grossed-up basis to cover any related cost consequences of the current tax liability. The Participating TO may also settle any tax controversy without receiving the Interconnection Customer's consent or any such written advice; however, any such settlement will relieve the Interconnection Customer from any obligation to indemnify the Participating TO for the tax at issue in the contest (unless the failure to obtain written advice is attributable to the Interconnection Customer's unreasonable refusal to the appointment of independent tax counsel).

**5.17.8 Refund.** In the event that (a) a private letter ruling is issued to the Participating TO which holds that any amount paid or the value of any property transferred by the Interconnection Customer to the Participating TO under the terms of this LGIA is not subject to federal income taxation, (b) any legislative change or administrative announcement, notice, ruling or other determination makes it reasonably clear to the Participating TO in good faith that any amount paid or the value of any property transferred by the Interconnection Customer to the Participating TO under the terms of this LGIA is not taxable to the Participating TO, (c) any abatement, appeal, protest, or other contest results in a determination that any payments or transfers made by the Interconnection Customer to the Participating TO are not subject to federal income tax, or (d) if the Participating TO receives a refund from any taxing authority for any overpayment of tax attributable to any payment or property transfer made by the Interconnection Customer to the Participating TO pursuant to this LGIA, the Participating TO shall promptly refund to the Interconnection Customer the following:

(i) any payment made by Interconnection Customer under this Article 5.17 for taxes that is attributable to the amount determined to be non-taxable, together with interest thereon,

(ii) interest on any amounts paid by the Interconnection Customer to the Participating TO for such taxes which the Participating TO did not submit to the taxing authority, calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date payment was made by the Interconnection Customer to the date the Participating TO refunds such payment to the Interconnection Customer, and

(iii) with respect to any such taxes paid by the Participating TO, any refund or credit the Participating TO receives or to which it may be entitled from any Governmental Authority, interest (or that portion thereof attributable to the payment described in clause (i), above) owed to the Participating TO for such overpayment of taxes (including any reduction in interest otherwise payable by the Participating TO to any Governmental Authority resulting from an offset or credit); provided, however, that the Participating TO will remit such amount promptly to the Interconnection Customer only after and to the extent that the Participating TO has received a tax refund, credit or offset from any Governmental Authority for any applicable overpayment of income tax related to the Participating TO's Interconnection Facilities.

The intent of this provision is to leave the Parties, to the extent practicable, in the event that no taxes are due with respect to any payment for Interconnection Facilities and Network Upgrades hereunder, in the same position they would have been in had no such tax payments been made.

**5.17.9 Taxes Other Than Income Taxes.** Upon the timely request by the Interconnection Customer, and at the Interconnection Customer's sole expense, the CAISO or Participating TO may appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against the CAISO or Participating TO for which the Interconnection Customer may be required to reimburse the CAISO or Participating TO under the terms of this LGIA. The Interconnection Customer shall pay to the Participating TO on a periodic basis, as invoiced by the Participating TO, the Participating TO's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. The Interconnection Customer, the CAISO, and the Participating TO shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by the Interconnection Customer to the CAISO or Participating TO for such taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, the Interconnection Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by the Participating TO.

**5.18 Tax Status.** Each Party shall cooperate with the others to maintain the other Parties' tax status. Nothing in this LGIA is intended to adversely affect the CAISO's or any Participating TO's tax exempt status with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds.

**5.19 Modification.**

**5.19.1 General.** The Interconnection Customer or the Participating TO may undertake modifications to its facilities, subject to the provisions of this LGIA and the CAISO Tariff.

If a Party plans to undertake a modification that reasonably may be expected to affect the other Parties' facilities, that Party shall provide to the other Parties sufficient information regarding such modification so that the other Parties may evaluate the potential impact of such modification prior to commencement of the work. Such information shall be deemed to be confidential hereunder and shall include information concerning the timing of such modifications and whether such modifications are expected to interrupt the flow of electricity from the Large Generating Facility. The Party desiring to perform such work shall provide the relevant drawings, plans, and specifications to the other Parties at least ninety (90) Calendar Days in advance of the commencement of the work or such shorter period upon which the Parties may agree, which agreement shall not unreasonably be withheld, conditioned or delayed.

In the case of Large Generating Facility modifications that do not require the Interconnection Customer to submit an Interconnection Request, the CAISO or Participating TO shall provide, within thirty (30) Calendar Days (or such other time as the Parties may agree), an estimate of any additional modifications to the CAISO Controlled Grid, Participating TO's Interconnection Facilities, Network Upgrades or Distribution Upgrades necessitated by such Interconnection Customer modification and a good faith estimate of the costs thereof. The Participating TO and the CAISO shall determine if a Large Generating Facility modification is a Material Modification in accordance with the LGIP.

**5.19.2 Standards.** Any additions, modifications, or replacements made to a Party's facilities shall be designed, constructed and operated in accordance with this LGIA and Good Utility Practice.

**5.19.3 Modification Costs.** The Interconnection Customer shall not be directly assigned the costs of any additions, modifications, or replacements that the Participating TO makes to the Participating TO's Interconnection Facilities or the Participating TO's Transmission System to facilitate the interconnection of a third party to the Participating TO's Interconnection Facilities or the Participating TO's Transmission System, or to provide transmission service to a third party under the CAISO Tariff. The Interconnection Customer shall be responsible for the costs of any additions, modifications, or replacements to the Interconnection Facilities that may be necessary to maintain or upgrade such Interconnection Facilities consistent with Applicable Laws and Regulations, Applicable Reliability Standards or Good Utility Practice.

## **ARTICLE 6. TESTING AND INSPECTION**

**6.1 Pre-Commercial Operation Date Testing and Modifications.** Prior to the Commercial Operation Date, the Participating TO shall test the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades and the Interconnection Customer shall test the Large Generating Facility and the Interconnection Customer's Interconnection Facilities to ensure their safe and reliable operation. Similar testing may be required after initial operation. Each Party shall make any modifications to its facilities that are found to be necessary as a result of such testing. The Interconnection Customer shall bear the cost of all such testing and modifications. The Interconnection Customer shall not commence initial parallel operation of an Electric Generating Unit with the Participating TO's Transmission System until the Participating TO provides prior written approval, which approval shall not be unreasonably withheld, for operation of such Electric Generating Unit. The Interconnection Customer shall generate test energy at the Large Generating Facility only if it has arranged for the delivery of such test energy.

**6.2 Post-Commercial Operation Date Testing and Modifications.** Each Party shall at its own expense perform routine inspection and testing of its facilities and equipment in accordance with Good Utility Practice as may be necessary to ensure the continued interconnection of the Large Generating Facility with the Participating TO's Transmission System in a safe and reliable

manner. Each Party shall have the right, upon advance written notice, to require reasonable additional testing of the other Party's facilities, at the requesting Party's expense, as may be in accordance with Good Utility Practice.

**6.3 Right to Observe Testing.** Each Party shall notify the other Parties at least fourteen (14) Calendar Days in advance of its performance of tests of its Interconnection Facilities or Generating Facility. The other Parties have the right, at their own expense, to observe such testing.

**6.4 Right to Inspect.** Each Party shall have the right, but shall have no obligation to: (i) observe another Party's tests and/or inspection of any of its System Protection Facilities and other protective equipment, including Power System Stabilizers; (ii) review the settings of another Party's System Protection Facilities and other protective equipment; and (iii) review another Party's maintenance records relative to the Interconnection Facilities, the System Protection Facilities and other protective equipment. A Party may exercise these rights from time to time as it deems necessary upon reasonable notice to the other Party. The exercise or non-exercise by a Party of any such rights shall not be construed as an endorsement or confirmation of any element or condition of the Interconnection Facilities or the System Protection Facilities or other protective equipment or the operation thereof, or as a warranty as to the fitness, safety, desirability, or reliability of same. Any information that a Party obtains through the exercise of any of its rights under this Article 6.4 shall be deemed to be Confidential Information and treated pursuant to Article 22 of this LGIA.

## **ARTICLE 7. METERING**

**7.1 General.** Each Party shall comply with any Applicable Reliability Standards and the Applicable Reliability Council requirements. The Interconnection Customer and CAISO shall comply with the provisions of the CAISO Tariff regarding metering, including Section 10 of the CAISO Tariff. Unless otherwise agreed by the Participating TO and the Interconnection Customer, the Participating TO may install additional Metering Equipment at the Point of Interconnection prior to any operation of any Electric Generating Unit and shall own, operate, test and maintain such Metering Equipment. Power flows to and from the Large Generating Facility shall be measured at or, at the CAISO's or Participating TO's option for its respective Metering Equipment, compensated to, the Point of Interconnection. The CAISO shall provide metering quantities to the Interconnection Customer upon request in accordance with the CAISO Tariff by directly polling the CAISO's meter data acquisition system. The Interconnection Customer shall bear all reasonable documented costs associated with the purchase, installation, operation, testing and maintenance of the Metering Equipment.

**7.2 Check Meters.** The Interconnection Customer, at its option and expense, may install and operate, on its premises and on its side of the Point of Interconnection, one or more check meters to check the CAISO-pollled meters or the Participating TO's meters. Such check meters shall be for check purposes only and shall not be used for the measurement of power flows for purposes of this LGIA, except in the case that no other means are available on a temporary basis at the option of the CAISO or the Participating TO. The check meters shall be subject at all reasonable times to inspection and examination by the CAISO or Participating TO or their designees. The installation, operation and maintenance thereof shall be performed entirely by the Interconnection Customer in accordance with Good Utility Practice.

**7.3 Participating TO Retail Metering.** The Participating TO may install retail revenue quality meters and associated equipment, pursuant to the Participating TO's applicable retail tariffs.

## **ARTICLE 8. COMMUNICATIONS**

**8.1 Interconnection Customer Obligations.** The Interconnection Customer shall maintain satisfactory operating communications with the CAISO in accordance with the provisions of the CAISO Tariff and with the Participating TO's dispatcher or representative designated by the Participating TO. The Interconnection Customer shall provide standard voice line, dedicated voice line and facsimile communications at its Large Generating Facility control room or central dispatch facility through use of either the public telephone system, or a voice communications system that does not rely on the public telephone system. The Interconnection Customer shall also provide the dedicated data circuit(s) necessary to provide Interconnection Customer data to the CAISO and Participating TO as set forth in Appendix D, Security Arrangements Details. The data circuit(s) shall extend from the Large Generating Facility to the location(s) specified by the CAISO and Participating TO. Any required maintenance of such communications equipment shall be performed by the Interconnection Customer. Operational communications shall be activated and maintained under, but not be limited to, the following events: system paralleling or separation, scheduled and unscheduled shutdowns, equipment clearances, and hourly and daily load data.

**8.2 Remote Terminal Unit.** Prior to the Initial Synchronization Date of each Electric Generating Unit, a Remote Terminal Unit, or equivalent data collection and transfer equipment acceptable to the Parties, shall be installed by the Interconnection Customer, or by the Participating TO at the Interconnection Customer's expense, to gather accumulated and instantaneous data to be telemetered to the location(s) designated by the CAISO and by the Participating TO through use of a dedicated point-to-point data circuit(s) as indicated in Article 8.1.

Telemetry to the CAISO shall be provided in accordance with the CAISO's technical standards for direct telemetry. For telemetry to the Participating TO, the communication protocol for the data circuit(s) shall be specified by the Participating TO. Instantaneous bi-directional real power and reactive power flow and any other required information must be telemetered directly to the location(s) specified by the Participating TO.

Each Party will promptly advise the other Parties if it detects or otherwise learns of any metering, telemetry or communications equipment errors or malfunctions that require the attention and/or correction by another Party. The Party owning such equipment shall correct such error or malfunction as soon as reasonably feasible.

**8.3 No Annexation.** Any and all equipment placed on the premises of a Party shall be and remain the property of the Party providing such equipment regardless of the mode and manner of annexation or attachment to real property, unless otherwise mutually agreed by the Parties.

## **ARTICLE 9. OPERATIONS**

**9.1 General.** Each Party shall comply with Applicable Reliability Standards and the Applicable Reliability Council requirements. Each Party shall provide to the other Party all information that may reasonably be required by the other Party to comply with Applicable Laws and Regulations and Applicable Reliability Standards.

**9.2 Balancing Authority Area Notification.** At least three months before Initial Synchronization Date, the Interconnection Customer shall notify the CAISO and Participating TO in writing of the Balancing Authority Area in which the Large Generating Facility intends to be located. If the Interconnection Customer intends to locate the Large Generating Facility in a Balancing Authority Area other than the Balancing Authority Area within whose electrically metered boundaries the Large Generating Facility is located, and if permitted to do so by the relevant transmission tariffs, all necessary arrangements, including but not limited to those set forth in Article 7 and Article 8 of this LGIA, and remote Balancing Authority Area generator interchange agreements, if applicable,



and the appropriate measures under such agreements, shall be executed and implemented prior to the placement of the Large Generating Facility in the other Balancing Authority Area.

**9.3 CAISO and Participating TO Obligations.** The CAISO and Participating TO shall cause the Participating TO's Transmission System to be operated and controlled in a safe and reliable manner and in accordance with this LGIA. The Participating TO at the Interconnection Customer's expense shall cause the Participating TO's Interconnection Facilities to be operated, maintained and controlled in a safe and reliable manner and in accordance with this LGIA. The CAISO and Participating TO may provide operating instructions to the Interconnection Customer consistent with this LGIA and Participating TO and CAISO operating protocols and procedures as they may change from time to time. The Participating TO and CAISO will consider changes to their operating protocols and procedures proposed by the Interconnection Customer.

**9.4 Interconnection Customer Obligations.** The Interconnection Customer shall at its own expense operate, maintain and control the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA. The Interconnection Customer shall operate the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in accordance with all applicable requirements of the Balancing Authority Area of which it is part, including such requirements as set forth in Appendix C, Interconnection Details, of this LGIA. Appendix C, Interconnection Details, will be modified to reflect changes to the requirements as they may change from time to time. A Party may request that another Party provide copies of the requirements set forth in Appendix C, Interconnection Details, of this LGIA. The Interconnection Customer shall not commence Commercial Operation of an Electric Generating Unit with the Participating TO's Transmission System until the Participating TO provides prior written approval, which approval shall not be unreasonably withheld, for operation of such Electric Generating Unit.

**9.5 Start-Up and Synchronization.** Consistent with the Parties' mutually acceptable procedures, the Interconnection Customer is responsible for the proper synchronization of each Electric Generating Unit to the CAISO Controlled Grid.

**9.6 Reactive Power.**

**9.6.1 Power Factor Design Criteria.** The Interconnection Customer shall design the Large Generating Facility to maintain a composite power delivery at continuous rated power output at the terminals of the Electric Generating Unit at a power factor within the range of 0.95 leading to 0.90 lagging, unless the CAISO has established different requirements that apply to all generators in the Balancing Authority Area on a comparable basis. Power factor design criteria for wind generators are provided in Appendix H of this LGIA.

**9.6.2 Voltage Schedules.** Once the Interconnection Customer has synchronized an Electric Generating Unit with the CAISO Controlled Grid, the CAISO or Participating TO shall require the Interconnection Customer to maintain a voltage schedule by operating the Electric Generating Unit to produce or absorb reactive power within the design limitations of the Electric Generating Unit set forth in Article 9.6.1 (Power Factor Design Criteria). CAISO's voltage schedules shall treat all sources of reactive power in the Balancing Authority Area in an equitable and not unduly discriminatory manner. The Participating TO shall exercise Reasonable Efforts to provide the Interconnection Customer with such schedules at least one (1) day in advance, and the CAISO or Participating TO may make changes to such schedules as necessary to maintain the reliability of the CAISO Controlled Grid or the Participating TO's electric system. The Interconnection Customer shall operate the Electric Generating Unit to maintain the specified output voltage or power factor within the design limitations of the Electric Generating Unit set forth in Article 9.6.1 (Power Factor Design Criteria), and as may be required by the CAISO to operate the Electric Generating Unit at a specific voltage schedule within the design limitations set forth in Article 9.6.1. If the Interconnection Customer is unable to maintain the

specified voltage or power factor, it shall promptly notify the CAISO and the Participating TO.

**9.6.2.1 Governors and Regulators.** Whenever an Electric Generating Unit is operated in parallel with the CAISO Controlled Grid and the speed governors (if installed on the Electric Generating Unit pursuant to Good Utility Practice) and voltage regulators are capable of operation, the Interconnection Customer shall operate the Electric Generating Unit with its speed governors and voltage regulators in automatic operation. If the Electric Generating Unit's speed governors and voltage regulators are not capable of such automatic operation, the Interconnection Customer shall immediately notify the CAISO and the Participating TO and ensure that the Electric Generating Unit operates as specified in Article 9.6.2 through manual operation and that such Electric Generating Unit's reactive power production or absorption (measured in MVARs) are within the design capability of the Electric Generating Unit(s) and steady state stability limits. The Interconnection Customer shall restore the speed governors and voltage regulators to automatic operation as soon as possible. If the Large Generating Facility's speed governors and voltage regulators are improperly tuned or malfunctioning, the CAISO shall have the right to order the reduction in output or disconnection of the Large Generating Facility if the reliability of the CAISO Controlled Grid would be adversely affected. The Interconnection Customer shall not cause its Large Generating Facility to disconnect automatically or instantaneously from the CAISO Controlled Grid or trip any Electric Generating Unit comprising the Large Generating Facility for an under or over frequency condition unless the abnormal frequency condition persists for a time period beyond the limits set forth in ANSI/IEEE Standard C37.106, or such other standard as applied to other generators in the Balancing Authority Area on a comparable basis.

**9.6.3 Payment for Reactive Power.** CAISO is required to pay the Interconnection Customer for reactive power that Interconnection Customer provides or absorbs from an Electric Generating Unit when the CAISO requests the Interconnection Customer to operate its Electric Generating Unit outside the range specified in Article 9.6.1, provided that if the CAISO pays other generators for reactive power service within the specified range, it must also pay the Interconnection Customer. Payments shall be pursuant to Article 11.6 or such other agreement to which the CAISO and Interconnection Customer have otherwise agreed.

## **9.7 Outages and Interruptions.**

### **9.7.1 Outages.**

**9.7.1.1 Outage Authority and Coordination.** Each Party may in accordance with Good Utility Practice in coordination with the other Parties remove from service any of its respective Interconnection Facilities or Network Upgrades that may impact another Party's facilities as necessary to perform maintenance or testing or to install or replace equipment. Absent an Emergency Condition, the Party scheduling a removal of such facility(ies) from service will use Reasonable Efforts to schedule such removal on a date and time mutually acceptable to all Parties. In all circumstances any Party planning to remove such facility(ies) from service shall use Reasonable Efforts to minimize the effect on the other Parties of such removal.

**9.7.1.2 Outage Schedules.** The CAISO shall post scheduled outages of CAISO Controlled Grid facilities in accordance with the provisions of the CAISO Tariff. The Interconnection Customer shall submit its planned maintenance schedules

for the Large Generating Facility to the CAISO in accordance with the CAISO Tariff. The Interconnection Customer shall update its planned maintenance schedules in accordance with the CAISO Tariff. The CAISO may request the Interconnection Customer to reschedule its maintenance as necessary to maintain the reliability of the CAISO Controlled Grid in accordance with the CAISO Tariff. Such planned maintenance schedules and updates and changes to such schedules shall be provided by the Interconnection Customer to the Participating TO concurrently with their submittal to the CAISO. The CAISO shall compensate the Interconnection Customer for any additional direct costs that the Interconnection Customer incurs as a result of having to reschedule maintenance in accordance with the CAISO Tariff. The Interconnection Customer will not be eligible to receive compensation, if during the twelve (12) months prior to the date of the scheduled maintenance, the Interconnection Customer had modified its schedule of maintenance activities.

**9.7.1.3 Outage Restoration.** If an outage on a Party's Interconnection Facilities or Network Upgrades adversely affects another Party's operations or facilities, the Party that owns or controls the facility that is out of service shall use Reasonable Efforts to promptly restore such facility(ies) to a normal operating condition consistent with the nature of the outage. The Party that owns or controls the facility that is out of service shall provide the other Parties, to the extent such information is known, information on the nature of the Emergency Condition, if the outage is caused by an Emergency Condition, an estimated time of restoration, and any corrective actions required. Initial verbal notice shall be followed up as soon as practicable with written notice explaining the nature of the outage, if requested by a Party, which may be provided by e-mail or facsimile.

**9.7.2 Interruption of Service.** If required by Good Utility Practice to do so, the CAISO or the Participating TO may require the Interconnection Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect the CAISO's or the Participating TO's ability to perform such activities as are necessary to safely and reliably operate and maintain the Participating TO's electric system or the CAISO Controlled Grid. The following provisions shall apply to any interruption or reduction permitted under this Article 9.7.2:

**9.7.2.1** The interruption or reduction shall continue only for so long as reasonably necessary under Good Utility Practice;

**9.7.2.2** Any such interruption or reduction shall be made on an equitable, non-discriminatory basis with respect to all generating facilities directly connected to the CAISO Controlled Grid, subject to any conditions specified in this LGIA;

**9.7.2.3** When the interruption or reduction must be made under circumstances which do not allow for advance notice, the CAISO or Participating TO, as applicable, shall notify the Interconnection Customer by telephone as soon as practicable of the reasons for the curtailment, interruption, or reduction, and, if known, its expected duration. Telephone notification shall be followed by written notification, if requested by the Interconnection Customer, as soon as practicable;

**9.7.2.4** Except during the existence of an Emergency Condition, the CAISO or Participating TO shall notify the Interconnection Customer in advance regarding the timing of such interruption or reduction and further notify the Interconnection Customer of the expected duration. The CAISO or Participating TO shall coordinate with the Interconnection Customer using Good Utility Practice to schedule the interruption or reduction during periods of least impact to the Interconnection Customer, the CAISO, and the Participating TO;

**9.7.2.5** The Parties shall cooperate and coordinate with each other to the extent necessary in order to restore the Large Generating Facility, Interconnection Facilities, the Participating TO's Transmission System, and the CAISO Controlled Grid to their normal operating state, consistent with system conditions and Good Utility Practice.

**9.7.3 Under-Frequency and Over Frequency Conditions.** The CAISO Controlled Grid is designed to automatically activate a load-shed program as required by Applicable Reliability Standards and the Applicable Reliability Council in the event of an under-frequency system disturbance. The Interconnection Customer shall implement under-frequency and over-frequency protection set points for the Large Generating Facility as required by Applicable Reliability Standards and the Applicable Reliability Council to ensure "ride through" capability. Large Generating Facility response to frequency deviations of pre-determined magnitudes, both under-frequency and over-frequency deviations, shall be studied and coordinated with the Participating TO and CAISO in accordance with Good Utility Practice. The term "ride through" as used herein shall mean the ability of a Generating Facility to stay connected to and synchronized with the CAISO Controlled Grid during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice.

**9.7.4 System Protection and Other Control Requirements.**

**9.7.4.1 System Protection Facilities.** The Interconnection Customer shall, at its expense, install, operate and maintain System Protection Facilities as a part of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. The Participating TO shall install at the Interconnection Customer's expense any System Protection Facilities that may be required on the Participating TO's Interconnection Facilities or the Participating TO's Transmission System as a result of the interconnection of the Large Generating Facility and the Interconnection Customer's Interconnection Facilities.

**9.7.4.2** The Participating TO's and Interconnection Customer's protection facilities shall be designed and coordinated with other systems in accordance with Applicable Reliability Standards, Applicable Reliability Council criteria, and Good Utility Practice.

**9.7.4.3** The Participating TO and Interconnection Customer shall each be responsible for protection of its facilities consistent with Good Utility Practice.

**9.7.4.4** The Participating TO's and Interconnection Customer's protective relay design shall incorporate the necessary test switches to perform the tests required in Article 6. The required test switches will be placed such that they allow operation of lockout relays while preventing breaker failure schemes from operating and causing unnecessary breaker operations and/or the tripping of the Interconnection Customer's Electric Generating Units.

**9.7.4.5** The Participating TO and Interconnection Customer will test, operate and maintain System Protection Facilities in accordance with Good Utility Practice and, if applicable, the requirements of the Participating TO's Interconnection Handbook.

**9.7.4.6** Prior to the in-service date, and again prior to the Commercial Operation Date, the Participating TO and Interconnection Customer or their agents shall perform a complete calibration test and functional trip test of the System Protection Facilities. At intervals suggested by Good Utility Practice, the standards and

procedures of the Participating TO, including, if applicable, the requirements of the Participating TO's Interconnection Handbook, and following any apparent malfunction of the System Protection Facilities, each Party shall perform both calibration and functional trip tests of its System Protection Facilities. These tests do not require the tripping of any in-service generation unit. These tests do, however, require that all protective relays and lockout contacts be activated.

**9.7.5 Requirements for Protection.** In compliance with Good Utility Practice and, if applicable, the requirements of the Participating TO's Interconnection Handbook, the Interconnection Customer shall provide, install, own, and maintain relays, circuit breakers and all other devices necessary to remove any fault contribution of the Large Generating Facility to any short circuit occurring on the Participating TO's Transmission System not otherwise isolated by the Participating TO's equipment, such that the removal of the fault contribution shall be coordinated with the protective requirements of the Participating TO's Transmission System. Such protective equipment shall include, without limitation, a disconnecting device with fault current-interrupting capability located between the Large Generating Facility and the Participating TO's Transmission System at a site selected upon mutual agreement (not to be unreasonably withheld, conditioned or delayed) of the Parties. The Interconnection Customer shall be responsible for protection of the Large Generating Facility and the Interconnection Customer's other equipment from such conditions as negative sequence currents, over- or under-frequency, sudden load rejection, over- or under-voltage, and generator loss-of-field. The Interconnection Customer shall be solely responsible to disconnect the Large Generating Facility and the Interconnection Customer's other equipment if conditions on the CAISO Controlled Grid could adversely affect the Large Generating Facility.

**9.7.6 Power Quality.** Neither the Participating TO's nor the Interconnection Customer's facilities shall cause excessive voltage flicker nor introduce excessive distortion to the sinusoidal voltage or current waves as defined by ANSI Standard C84.1-1989, in accordance with IEEE Standard 519, any applicable superseding electric industry standard, or any alternative Applicable Reliability Standard or Applicable Reliability Council standard. In the event of a conflict among ANSI Standard C84.1-1989, any applicable superseding electric industry standard, or any alternative Applicable Reliability Standard or Applicable Reliability Council standard, the alternative Applicable Reliability Standard or Applicable Reliability Council standard shall control.

**9.8 Switching and Tagging Rules.** Each Party shall provide the other Parties a copy of its switching and tagging rules that are applicable to the other Parties' activities. Such switching and tagging rules shall be developed on a non-discriminatory basis. The Parties shall comply with applicable switching and tagging rules, as amended from time to time, in obtaining clearances for work or for switching operations on equipment.

**9.9 Use of Interconnection Facilities by Third Parties.**

**9.9.1 Purpose of Interconnection Facilities.** Except as may be required by Applicable Laws and Regulations, or as otherwise agreed to among the Parties, the Interconnection Facilities shall be constructed for the sole purpose of interconnecting the Large Generating Facility to the Participating TO's Transmission System and shall be used for no other purpose.

**9.9.2 Third Party Users.** If required by Applicable Laws and Regulations or if the Parties mutually agree, such agreement not to be unreasonably withheld, to allow one or more third parties to use the Participating TO's Interconnection Facilities, or any part thereof, the Interconnection Customer will be entitled to compensation for the capital expenses it incurred in connection with the Interconnection Facilities based upon the pro rata use of the Interconnection Facilities by the Participating TO, all third party users, and the

Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually-agreed upon methodology. In addition, cost responsibility for ongoing costs, including operation and maintenance costs associated with the Interconnection Facilities, will be allocated between the Interconnection Customer and any third party users based upon the pro rata use of the Interconnection Facilities by the Participating TO, all third party users, and the Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually agreed upon methodology. If the issue of such compensation or allocation cannot be resolved through such negotiations, it shall be submitted to FERC for resolution.

- 9.10 Disturbance Analysis Data Exchange.** The Parties will cooperate with one another in the analysis of disturbances to either the Large Generating Facility or the CAISO Controlled Grid by gathering and providing access to any information relating to any disturbance, including information from oscillography, protective relay targets, breaker operations and sequence of events records, and any disturbance information required by Good Utility Practice.

## **ARTICLE 10. MAINTENANCE**

- 10.1 Participating TO Obligations.** The Participating TO shall maintain the Participating TO's Transmission System and the Participating TO's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA.
- 10.2 Interconnection Customer Obligations.** The Interconnection Customer shall maintain the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA.
- 10.3 Coordination.** The Parties shall confer regularly to coordinate the planning, scheduling and performance of preventive and corrective maintenance on the Large Generating Facility and the Interconnection Facilities.
- 10.4 Secondary Systems.** The Participating TO and Interconnection Customer shall cooperate with the other Parties in the inspection, maintenance, and testing of control or power circuits that operate below 600 volts, AC or DC, including, but not limited to, any hardware, control or protective devices, cables, conductors, electric raceways, secondary equipment panels, transducers, batteries, chargers, and voltage and current transformers that directly affect the operation of a Party's facilities and equipment which may reasonably be expected to impact the other Parties. Each Party shall provide advance notice to the other Parties before undertaking any work on such circuits, especially on electrical circuits involving circuit breaker trip and close contacts, current transformers, or potential transformers.
- 10.5 Operating and Maintenance Expenses.** Subject to the provisions herein addressing the use of facilities by others, and except for operations and maintenance expenses associated with modifications made for providing interconnection or transmission service to a third party and such third party pays for such expenses, the Interconnection Customer shall be responsible for all reasonable expenses including overheads, associated with: (1) owning, operating, maintaining, repairing, and replacing the Interconnection Customer's Interconnection Facilities; and (2) operation, maintenance, repair and replacement of the Participating TO's Interconnection Facilities.

## **ARTICLE 11. PERFORMANCE OBLIGATION**

- 11.1 Interconnection Customer's Interconnection Facilities.** The Interconnection Customer shall design, procure, construct, install, own and/or control the Interconnection Customer's Interconnection Facilities described in Appendix A at its sole expense.

**11.2 Participating TO's Interconnection Facilities.** The Participating TO shall design, procure, construct, install, own and/or control the Participating TO's Interconnection Facilities described in Appendix A at the sole expense of the Interconnection Customer. Unless the Participating TO elects to fund the capital for the Participating TO's Interconnection Facilities, they shall be solely funded by the Interconnection Customer.

**11.3 Network Upgrades and Distribution Upgrades.** The Participating TO shall design, procure, construct, install, and own the Network Upgrades and Distribution Upgrades described in Appendix A. The Interconnection Customer shall be responsible for all costs related to Distribution Upgrades. Unless the Participating TO elects to fund the capital for the Distribution Upgrades and Network Upgrades, they shall be funded by the Interconnection Customer in an amount determined pursuant to the methodology set forth in Section 13 of the LGIP. This specific amount is set forth in Appendix G to this LGIA.

**11.4 Transmission Credits.** No later than thirty (30) Calendar Days prior to the Commercial Operation Date, the Interconnection Customer may make a one-time election by written notice to the CAISO and the Participating TO to receive Congestion Revenue Rights as defined in and as available under the CAISO Tariff at the time of the election in accordance with the CAISO Tariff, in lieu of a refund of the cost of Network Upgrades in accordance with Article 11.4.1.

**11.4.1 Repayment of Amounts Advanced for Network Upgrades.** Upon the Commercial Operation Date, the Interconnection Customer shall be entitled to a repayment, equal to the total amount paid to the Participating TO for the costs of Network Upgrades for which it is responsible, as set forth in Appendix G. Such amount shall include any tax gross-up or other tax-related payments associated with Network Upgrades not refunded to the Interconnection Customer pursuant to Article 5.17.8 or otherwise, and shall be paid to the Interconnection Customer by the Participating TO on a dollar-for-dollar basis either through (1) direct payments made on a levelized basis over the five-year period commencing on the Commercial Operation Date; or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years from the Commercial Operation Date. Notwithstanding the foregoing, if this LGIA terminates within five (5) years from the Commercial Operation Date, the Participating TO's obligation to pay refunds to the Interconnection Customer shall cease as of the date of termination. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment. Interest shall continue to accrue on the repayment obligation so long as this LGIA is in effect. The Interconnection Customer may assign such repayment rights to any person.

If the Large Generating Facility fails to achieve Commercial Operation, but it or another Generating Facility is later constructed and makes use of the Network Upgrades, the Participating TO shall at that time reimburse Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the Generating Facility, if different, is responsible for identifying and demonstrating to the Participating TO the appropriate entity to which reimbursement must be made in order to implement the intent of this reimbursement obligation.

**11.4.2 Special Provisions for Affected Systems.** The Interconnection Customer shall enter into an agreement with the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid, as applicable, in accordance with the LGIP. Such agreement shall specify the terms governing payments to be made by the Interconnection Customer to the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid as well as the repayment by the owner

of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid. In no event shall the Participating TO be responsible for the repayment for any facilities that are not part of the Participating TO's Transmission System. In the event the Participating TO is a joint owner with an Affected System or with any other co-owner of a facility affected by the Large Generating Facility, the Participating TO's obligation to reimburse the Interconnection Customer for payments made to address the impacts of the Large Generating Facility on the system shall not exceed the proportionate amount of the cost of any upgrades attributable to the proportion of the jointly-owned facility owned by the Participating TO.

**11.4.3** Notwithstanding any other provision of this LGIA, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, Congestion Revenue Rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements, merchant transmission Congestion Revenue Rights in accordance with Section 36.11 of the CAISO Tariff, or transmission credits for transmission service that is not associated with the Large Generating Facility.

**11.5** **Provision of Interconnection Financial Security.** The Interconnection Customer is obligated to provide all necessary Interconnection Financial Security required under Section 9 of the LGIP in a manner acceptable under Section 9 of the LGIP. Failure to satisfy the LGIP's requirements for the provision of Interconnection Financial Security shall result in the Interconnection Request being deemed withdrawn and subject to LGIP Section 3.8.

**11.6** **Interconnection Customer Compensation.** If the CAISO requests or directs the Interconnection Customer to provide a service pursuant to Articles 9.6.3 (Payment for Reactive Power) or 13.5.1 of this LGIA, the CAISO shall compensate the Interconnection Customer in accordance with the CAISO Tariff.

**11.6.1** **Interconnection Customer Compensation for Actions During Emergency Condition.** The CAISO shall compensate the Interconnection Customer in accordance with the CAISO Tariff for its provision of real and reactive power and other Emergency Condition services that the Interconnection Customer provides to support the CAISO Controlled Grid during an Emergency Condition in accordance with Article 11.6.

## **ARTICLE 12. INVOICE**

**12.1** **General.** The Participating TO shall submit to the Interconnection Customer, on a monthly basis, invoices of amounts due pursuant to this LGIA for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party under this LGIA, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party. Notwithstanding the foregoing, any invoices between the CAISO and another Party shall be submitted and paid in accordance with the CAISO Tariff.

**12.2** **Final Invoice.** As soon as reasonably practicable, but within twelve months after completion of the construction of the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, the Participating TO shall provide an invoice of the final cost of the construction of the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, and shall set forth such costs in sufficient detail to enable the Interconnection Customer to compare the actual costs with the estimates and to ascertain



deviations, if any, from the cost estimates. With respect to costs associated with the Participating TO's Interconnection Facilities and Distribution Upgrades, the Participating TO shall refund to the Interconnection Customer any amount by which the actual payment by the Interconnection Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice; or, in the event the actual costs of construction exceed the Interconnection Customer's actual payment for estimated costs, then the Interconnection Customer shall pay to the Participating TO any amount by which the actual costs of construction exceed the actual payment by the Interconnection Customer for estimated costs within thirty (30) Calendar Days of the issuance of such final construction invoice. With respect to costs associated with Network Upgrades, the Participating TO shall refund to the Interconnection Customer any amount by which the actual payment by the Interconnection Customer for estimated costs exceeds the actual costs of construction multiplied by the Interconnection Customer's percentage share of those costs, as set forth in Appendix G to this LGIA within thirty (30) Calendar Days of the issuance of such final construction invoice. In the event the actual costs of construction multiplied by the Interconnection Customer's percentage share of those costs exceed the Interconnection Customer's actual payment for estimated costs, then the Participating TO shall recover such difference through its transmission service rates.

**12.3 Payment.** Invoices shall be rendered to the Interconnection Customer at the address specified in Appendix F. The Interconnection Customer shall pay, or Participating TO shall refund, the amounts due within thirty (30) Calendar Days of the Interconnection Customer's receipt of the invoice. All payments shall be made in immediately available funds payable to the Interconnection Customer or Participating TO, or by wire transfer to a bank named and account designated by the invoicing Interconnection Customer or Participating TO. Payment of invoices by any Party will not constitute a waiver of any rights or claims any Party may have under this LGIA.

**12.4 Disputes.** In the event of a billing dispute between the Interconnection Customer and the Participating TO, the Participating TO and the CAISO shall continue to provide Interconnection Service under this LGIA as long as the Interconnection Customer: (i) continues to make all payments not in dispute; and (ii) pays to the Participating TO or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If the Interconnection Customer fails to meet these two requirements for continuation of service, then the Participating TO may provide notice to the Interconnection Customer of a Default pursuant to Article 17. Within thirty (30) Calendar Days after the resolution of the dispute, the Party that owes money to the other Party shall pay the amount due with interest calculated in accordance with the methodology set forth in FERC's Regulations at 18 C.F.R. § 35.19a(a)(2)(iii). Notwithstanding the foregoing, any billing dispute between the CAISO and another Party shall be resolved in accordance with the provisions of Article 27 of this LGIA.

## **ARTICLE 13. EMERGENCIES**

**13.1 [Reserved]**

**13.2 Obligations.** Each Party shall comply with the Emergency Condition procedures of the CAISO, NERC, the Applicable Reliability Council, Applicable Reliability Standards, Applicable Laws and Regulations, and any emergency procedures set forth in this LGIA.

**13.3 Notice.** The Participating TO or the CAISO shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that affects the Participating TO's Interconnection Facilities or Distribution System or the CAISO Controlled Grid, respectively, that may reasonably be expected to affect the Interconnection Customer's operation of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. The Interconnection Customer shall notify the Participating TO and the CAISO promptly when it becomes aware of an Emergency Condition that affects the Large Generating Facility or the

Interconnection Customer's Interconnection Facilities that may reasonably be expected to affect the CAISO Controlled Grid or the Participating TO's Interconnection Facilities. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of the Interconnection Customer's or Participating TO's facilities and operations, its anticipated duration and the corrective action taken and/or to be taken. The initial notice shall be followed as soon as practicable with written notice, if requested by a Party, which may be provided by electronic mail or facsimile, or in the case of the CAISO may be publicly posted on the CAISO's internet web site.

**13.4 Immediate Action.** Unless, in the Interconnection Customer's reasonable judgment, immediate action is required, the Interconnection Customer shall obtain the consent of the CAISO and the Participating TO, such consent to not be unreasonably withheld, prior to performing any manual switching operations at the Large Generating Facility or the Interconnection Customer's Interconnection Facilities in response to an Emergency Condition declared by the Participating TO or CAISO or in response to any other emergency condition.

### **13.5 CAISO and Participating TO Authority.**

**13.5.1 General.** The CAISO and Participating TO may take whatever actions or inactions, including issuance of dispatch instructions, with regard to the CAISO Controlled Grid or the Participating TO's Interconnection Facilities or Distribution System they deem necessary during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the CAISO Controlled Grid or the Participating TO's Interconnection Facilities or Distribution System, and (iii) limit or prevent damage, and (iv) expedite restoration of service.

The Participating TO and the CAISO shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. The Participating TO or the CAISO may, on the basis of technical considerations, require the Large Generating Facility to mitigate an Emergency Condition by taking actions necessary and limited in scope to remedy the Emergency Condition, including, but not limited to, directing the Interconnection Customer to shut-down, start-up, increase or decrease the real or reactive power output of the Large Generating Facility; implementing a reduction or disconnection pursuant to Article 13.5.2; directing the Interconnection Customer to assist with black start (if available) or restoration efforts; or altering the outage schedules of the Large Generating Facility and the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall comply with all of the CAISO's and Participating TO's operating instructions concerning Large Generating Facility real power and reactive power output within the manufacturer's design limitations of the Large Generating Facility's equipment that is in service and physically available for operation at the time, in compliance with Applicable Laws and Regulations.

**13.5.2 Reduction and Disconnection.** The Participating TO or the CAISO may reduce Interconnection Service or disconnect the Large Generating Facility or the Interconnection Customer's Interconnection Facilities when such reduction or disconnection is necessary under Good Utility Practice due to Emergency Conditions. These rights are separate and distinct from any right of curtailment of the CAISO pursuant to the CAISO Tariff. When the CAISO or Participating TO can schedule the reduction or disconnection in advance, the CAISO or Participating TO shall notify the Interconnection Customer of the reasons, timing and expected duration of the reduction or disconnection. The CAISO or Participating TO shall coordinate with the Interconnection Customer using Good Utility Practice to schedule the reduction or disconnection during periods of least impact to the Interconnection Customer and the CAISO and Participating TO. Any reduction or disconnection shall continue only for so long as reasonably necessary under Good Utility Practice. The Parties shall cooperate

with each other to restore the Large Generating Facility, the Interconnection Facilities, and the CAISO Controlled Grid to their normal operating state as soon as practicable consistent with Good Utility Practice.

**13.6 Interconnection Customer Authority.** Consistent with Good Utility Practice, this LGIA, and the CAISO Tariff, the Interconnection Customer may take actions or inactions with regard to the Large Generating Facility or the Interconnection Customer's Interconnection Facilities during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service. Interconnection Customer shall use Reasonable Efforts to minimize the effect of such actions or inactions on the CAISO Controlled Grid and the Participating TO's Interconnection Facilities. The CAISO and Participating TO shall use Reasonable Efforts to assist Interconnection Customer in such actions.

**13.7 Limited Liability.** Except as otherwise provided in Article 11.6.1 of this LGIA, no Party shall be liable to any other Party for any action it takes in responding to an Emergency Condition so long as such action is made in good faith and is consistent with Good Utility Practice.

#### **ARTICLE 14. REGULATORY REQUIREMENTS AND GOVERNING LAW**

**14.1 Regulatory Requirements.** Each Party's obligations under this LGIA shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the applying Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek and use its Reasonable Efforts to obtain such other approvals. Nothing in this LGIA shall require the Interconnection Customer to take any action that could result in its inability to obtain, or its loss of, status or exemption under the Federal Power Act or the Public Utility Holding Company Act of 1935, as amended, or the Public Utility Regulatory Policies Act of 1978, or the Energy Policy Act of 2005.

#### **14.2 Governing Law.**

**14.2.1** The validity, interpretation and performance of this LGIA and each of its provisions shall be governed by the laws of the state where the Point of Interconnection is located, without regard to its conflicts of law principles.

**14.2.2** This LGIA is subject to all Applicable Laws and Regulations.

**14.2.3** Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, rules, or regulations of a Governmental Authority.

#### **ARTICLE 15. NOTICES**

**15.1 General.** Unless otherwise provided in this LGIA, any notice, demand or request required or permitted to be given by a Party to another and any instrument required or permitted to be tendered or delivered by a Party in writing to another shall be effective when delivered and may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered mail, addressed to the Party, or personally delivered to the Party, at the address set out in Appendix F, Addresses for Delivery of Notices and Billings.

A Party must update the information in Appendix F as information changes. A Party may change the notice information in this LGIA by giving five (5) Business Days written notice prior to the effective date of the change. Such changes shall not constitute an amendment to this LGIA.

**15.2 Billings and Payments.** Billings and payments shall be sent to the addresses set out in Appendix F.

**15.3 Alternative Forms of Notice.** Any notice or request required or permitted to be given by a Party to another and not required by this LGIA to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out in Appendix F.

**15.4 Operations and Maintenance Notice.** Each Party shall notify the other Parties in writing of the identity of the person(s) that it designates as the point(s) of contact with respect to the implementation of Articles 9 and 10.

## **ARTICLE 16. FORCE MAJEURE**

### **16.1 Force Majeure.**

**16.1.1** Economic hardship is not considered a Force Majeure event.

**16.1.2** No Party shall be considered to be in Default with respect to any obligation hereunder, (including obligations under Article 4), other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other Party in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this Article shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall exercise due diligence to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

## **ARTICLE 17. DEFAULT**

### **17.1 Default.**

**17.1.1 General.** No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this LGIA or the result of an act or omission of the other Party. Upon a Breach, the affected non-Breaching Party(ies) shall give written notice of such Breach to the Breaching Party. Except as provided in Article 17.1.2, the Breaching Party shall have thirty (30) Calendar Days from receipt of the Default notice within which to cure such Breach; provided however, if such Breach is not capable of cure within thirty (30) Calendar Days, the Breaching Party shall commence such cure within thirty (30) Calendar Days after notice and continuously and diligently complete such cure within ninety (90) Calendar Days from receipt of the Default notice; and, if cured within such time, the Breach specified in such notice shall cease to exist.

**17.1.2 Right to Terminate.** If a Breach is not cured as provided in this Article, or if a Breach is not capable of being cured within the period provided for herein, the affected non-Breaching Party(ies) shall have the right to declare a Default and terminate this LGIA by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not such Party(ies) terminates this LGIA, to recover from the Breaching Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this Article will survive termination of this LGIA.

## **ARTICLE 18. INDEMNITY, CONSEQUENTIAL DAMAGES AND INSURANCE**

**18.1 Indemnity.** Each Party shall at all times indemnify, defend, and hold the other Parties harmless from, any and all Losses arising out of or resulting from another Party's action or inactions of its obligations under this LGIA on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the Indemnified Party.

**18.1.1 Indemnified Party.** If an Indemnified Party is entitled to indemnification under this Article 18 as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 18.1, to assume the defense of such claim, such Indemnified Party may at the expense of the Indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

**18.1.2 Indemnifying Party.** If an Indemnifying Party is obligated to indemnify and hold any Indemnified Party harmless under this Article 18, the amount owing to the Indemnified Party shall be the amount of such Indemnified Party's actual Loss, net of any insurance or other recovery.

**18.1.3 Indemnity Procedures.** Promptly after receipt by an Indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 18.1 may apply, the Indemnified Party shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Party. If the defendants in any such action include one or more Indemnified Parties and the Indemnifying Party and if the Indemnified Party reasonably concludes that there may be legal defenses available to it and/or other Indemnified Parties which are different from or additional to those available to the Indemnifying Party, the Indemnified Party shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Party or Indemnified Parties having such differing or additional legal defenses.

The Indemnified Party shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Party and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Party, or there exists a conflict or adversity of interest between the Indemnified Party and the Indemnifying Party, in such event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Party, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Party, which shall not be unreasonably withheld, conditioned or delayed.

**18.2 Consequential Damages.** Other than the liquidated damages heretofore described in Article 5.3, in no event shall any Party be liable under any provision of this LGIA for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract,

in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to another Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

**18.3 Insurance.** Each Party shall, at its own expense, maintain in force throughout the period of this LGIA, and until released by the other Parties, the following minimum insurance coverages, with insurers rated no less than A- (with a minimum size rating of VII) by Bests' Insurance Guide and Key Ratings and authorized to do business in the state where the Point of Interconnection is located, except in the case of the CAISO, the State of California:

**18.3.1** Employer's Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located, except in the case of the CAISO, the State of California.

**18.3.2** Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate combined single limit for personal injury, bodily injury, including death and property damage.

**18.3.3** Business Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage.

**18.3.4** Excess Public Liability Insurance over and above the Employer's Liability Commercial General Liability and Business Automobile Liability Insurance coverage, with a minimum combined single limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.

**18.3.5** The Commercial General Liability Insurance, Business Automobile Insurance and Excess Public Liability Insurance policies shall name the other Parties, their parents, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this LGIA against the Other Party Group and provide thirty (30) Calendar Days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition.

**18.3.6** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Public Liability Insurance policies shall contain provisions that specify that the policies are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Party shall be responsible for its respective deductibles or retentions.

**18.3.7** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Public Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this

LGIA, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed by the Parties.

- 18.3.8** The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this LGIA.
- 18.3.9** Within ten (10) Calendar Days following execution of this LGIA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) Calendar Days thereafter, each Party shall provide certification of all insurance required in this LGIA, executed by each insurer or by an authorized representative of each insurer.
- 18.3.10** Notwithstanding the foregoing, each Party may self-insure to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program; provided that, such Party's senior unsecured debt or issuer rating is BBB-, or better, as rated by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior unsecured debt rating and issuer rating are both unrated by Standard & Poor's or are both rated at less than BBB- by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9. In the event that a Party is permitted to self-insure pursuant to this Article 18.3.10, it shall notify the other Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.
- 18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this LGIA.

## **ARTICLE 19. ASSIGNMENT**

- 19.1** **Assignment.** This LGIA may be assigned by a Party only with the written consent of the other Parties; provided that a Party may assign this LGIA without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this LGIA; and provided further that the Interconnection Customer shall have the right to assign this LGIA, without the consent of the CAISO or Participating TO, for collateral security purposes to aid in providing financing for the Large Generating Facility, provided that the Interconnection Customer will promptly notify the CAISO and Participating TO of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the CAISO and Participating TO of the date and particulars of any such exercise of assignment right(s), including providing the CAISO and Participating TO with proof that it meets the requirements of Articles 11.5 and 18.3. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this LGIA shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## **ARTICLE 20. SEVERABILITY**

- 20.1** **Severability.** If any provision in this LGIA is finally determined to be invalid, void or unenforceable by any court or other Governmental Authority having jurisdiction, such

determination shall not invalidate, void or make unenforceable any other provision, agreement or covenant of this LGIA; provided that if the Interconnection Customer (or any third party, but only if such third party is not acting at the direction of the Participating TO or CAISO) seeks and obtains such a final determination with respect to any provision of the Alternate Option (Article 5.1.2), or the Negotiated Option (Article 5.1.4), then none of the provisions of Article 5.1.2 or 5.1.4 shall thereafter have any force or effect and the Parties' rights and obligations shall be governed solely by the Standard Option (Article 5.1.1).

## **ARTICLE 21. COMPARABILITY**

**21.1 Comparability.** The Parties will comply with all applicable comparability and code of conduct laws, rules and regulations, as amended from time to time.

## **ARTICLE 22. CONFIDENTIALITY**

**22.1 Confidentiality.** Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by any of the Parties to the other Parties prior to the execution of this LGIA.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Parties receiving the information that the information is confidential.

If requested by any Party, the other Parties shall provide in writing, the basis for asserting that the information referred to in this Article 22 warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

**22.1.1 Term.** During the term of this LGIA, and for a period of three (3) years after the expiration or termination of this LGIA, except as otherwise provided in this Article 22, each Party shall hold in confidence and shall not disclose to any person Confidential Information.

**22.1.2 Scope.** Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of this LGIA; or (6) is required, in accordance with Article 22.1.7 of this LGIA, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this LGIA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

**22.1.3 Release of Confidential Information.** No Party shall release or disclose Confidential Information to any other person, except to its employees, consultants, Affiliates (limited by the Standards of Conduct requirements set forth in Part 358 of FERC's Regulations, 18 C.F.R. 358), subcontractors, or to parties who may be or considering providing



financing to or equity participation with the Interconnection Customer, or to potential purchasers or assignees of the Interconnection Customer, on a need-to-know basis in connection with this LGIA, unless such person has first been advised of the confidentiality provisions of this Article 22 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 22.

**22.1.4 Rights.** Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Parties. The disclosure by each Party to the other Parties of Confidential Information shall not be deemed a waiver by a Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

**22.1.5 No Warranties.** The mere fact that a Party has provided Confidential Information does not constitute a warranty or representation as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to the other Parties nor to enter into any further agreements or proceed with any other relationship or joint venture.

**22.1.6 Standard of Care.** Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under this LGIA or its regulatory requirements.

**22.1.7 Order of Disclosure.** If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Parties with prompt notice of such request(s) or requirement(s) so that the other Parties may seek an appropriate protective order or waive compliance with the terms of this LGIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

**22.1.8 Termination of Agreement.** Upon termination of this LGIA for any reason, each Party shall, within ten (10) Calendar Days of receipt of a written request from another Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the other Party) or return to the other Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the other Party.

**22.1.9 Remedies.** The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this Article 22. Each Party accordingly agrees that the other Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Article 22, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 22, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 22.

**22.1.10 Disclosure to FERC, its Staff, or a State.** Notwithstanding anything in this Article 22 to the contrary, and pursuant to 18 C.F.R. section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this LGIA, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. section 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this LGIA prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other Parties to the LGIA when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

**22.1.11** Subject to the exception in Article 22.1.10, Confidential Information shall not be disclosed by the other Parties to any person not employed or retained by the other Parties, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Parties, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this LGIA or as a transmission service provider or a Balancing Authority including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. The Party asserting confidentiality shall notify the other Parties in writing of the information it claims is confidential. Prior to any disclosures of another Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

## **ARTICLE 23. ENVIRONMENTAL RELEASES**

**23.1** Each Party shall notify the other Parties, first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Large Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Parties. The notifying Party shall: (i) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than twenty-four hours after such Party becomes aware of the occurrence; and (ii) promptly furnish to the other Parties copies of any publicly available reports filed with any Governmental Authorities addressing such events.

## **ARTICLE 24. INFORMATION REQUIREMENTS**

**24.1 Information Acquisition.** The Participating TO and the Interconnection Customer shall submit specific information regarding the electrical characteristics of their respective facilities to each other as described below and in accordance with Applicable Reliability Standards.

**24.2 Information Submission by Participating TO.** The initial information submission by the Participating TO shall occur no later than one hundred eighty (180) Calendar Days prior to Trial

Operation and shall include the Participating TO's Transmission System information necessary to allow the Interconnection Customer to select equipment and meet any system protection and stability requirements, unless otherwise agreed to by the Participating TO and the Interconnection Customer. On a monthly basis the Participating TO shall provide the Interconnection Customer and the CAISO a status report on the construction and installation of the Participating TO's Interconnection Facilities and Network Upgrades, including, but not limited to, the following information: (1) progress to date; (2) a description of the activities since the last report; (3) a description of the action items for the next period; and (4) the delivery status of equipment ordered.

**24.3 Updated Information Submission by Interconnection Customer.** The updated information submission by the Interconnection Customer, including manufacturer information, shall occur no later than one hundred eighty (180) Calendar Days prior to the Trial Operation. The Interconnection Customer shall submit a completed copy of the Electric Generating Unit data requirements contained in Appendix 1 to the LGIP. It shall also include any additional information provided to the Participating TO and the CAISO for the Interconnection Studies. Information in this submission shall be the most current Electric Generating Unit design or expected performance data. Information submitted for stability models shall be compatible with the Participating TO and CAISO standard models. If there is no compatible model, the Interconnection Customer will work with a consultant mutually agreed to by the Parties to develop and supply a standard model and associated information.

If the Interconnection Customer's data is materially different from what was originally provided to the Participating TO and the CAISO for the Interconnection Studies, then the Participating TO and the CAISO will conduct appropriate studies pursuant to the LGIP to determine the impact on the Participating TO's Transmission System and affected portions of the CAISO Controlled Grid based on the actual data submitted pursuant to this Article 24.3. The Interconnection Customer shall not begin Trial Operation until such studies are completed and all other requirements of this LGIA are satisfied.

**24.4 Information Supplementation.** Prior to the Trial Operation date, the Parties shall supplement their information submissions described above in this Article 24 with any and all "as-built" Electric Generating Unit information or "as-tested" performance information that differs from the initial submissions or, alternatively, written confirmation that no such differences exist. The Interconnection Customer shall conduct tests on the Electric Generating Unit as required by Good Utility Practice such as an open circuit "step voltage" test on the Electric Generating Unit to verify proper operation of the Electric Generating Unit's automatic voltage regulator.

Unless otherwise agreed, the test conditions shall include: (1) Electric Generating Unit at synchronous speed; (2) automatic voltage regulator on and in voltage control mode; and (3) a five percent (5 percent) change in Electric Generating Unit terminal voltage initiated by a change in the voltage regulators reference voltage. The Interconnection Customer shall provide validated test recordings showing the responses of Electric Generating Unit terminal and field voltages. In the event that direct recordings of these voltages is impractical, recordings of other voltages or currents that mirror the response of the Electric Generating Unit's terminal or field voltage are acceptable if information necessary to translate these alternate quantities to actual Electric Generating Unit terminal or field voltages is provided. Electric Generating Unit testing shall be conducted and results provided to the Participating TO and the CAISO for each individual Electric Generating Unit in a station.

Subsequent to the Commercial Operation Date, the Interconnection Customer shall provide the Participating TO and the CAISO any information changes due to equipment replacement, repair, or adjustment. The Participating TO shall provide the Interconnection Customer any information changes due to equipment replacement, repair or adjustment in the directly connected substation or any adjacent Participating TO-owned substation that may affect the Interconnection

Customer's Interconnection Facilities equipment ratings, protection or operating requirements. The Parties shall provide such information pursuant to Article 5.19.

## **ARTICLE 25. INFORMATION ACCESS AND AUDIT RIGHTS**

**25.1 Information Access.** Each Party (the "disclosing Party") shall make available to the other Party information that is in the possession of the disclosing Party and is necessary in order for the other Party to: (i) verify the costs incurred by the disclosing Party for which the other Party is responsible under this LGIA; and (ii) carry out its obligations and responsibilities under this LGIA. The Parties shall not use such information for purposes other than those set forth in this Article 25.1 and to enforce their rights under this LGIA. Nothing in this Article 25 shall obligate the CAISO to make available to a Party any third party information in its possession or control if making such third party information available would violate a CAISO Tariff restriction on the use or disclosure of such third party information.

**25.2 Reporting of Non-Force Majeure Events.** Each Party (the "notifying Party") shall notify the other Parties when the notifying Party becomes aware of its inability to comply with the provisions of this LGIA for a reason other than a Force Majeure event. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this Article shall not entitle the Party receiving such notification to allege a cause for anticipatory breach of this LGIA.

**25.3 Audit Rights.** Subject to the requirements of confidentiality under Article 22 of this LGIA, the Parties' audit rights shall include audits of a Party's costs pertaining to such Party's performance or satisfaction of obligations owed to the other Party under this LGIA, calculation of invoiced amounts, the CAISO's efforts to allocate responsibility for the provision of reactive support to the CAISO Controlled Grid, the CAISO's efforts to allocate responsibility for interruption or reduction of generation on the CAISO Controlled Grid, and each such Party's actions in an Emergency Condition.

**25.3.1** The Interconnection Customer and the Participating TO shall each have the right, during normal business hours, and upon prior reasonable notice to the other Party, to audit at its own expense the other Party's accounts and records pertaining to either such Party's performance or either such Party's satisfaction of obligations owed to the other Party under this LGIA. Subject to Article 25.3.2, any audit authorized by this Article shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to each such Party's performance and satisfaction of obligations under this LGIA. Each such Party shall keep such accounts and records for a period equivalent to the audit rights periods described in Article 25.4.

**25.3.2** Notwithstanding anything to the contrary in Article 25.3, each Party's rights to audit the CAISO's accounts and records shall be as set forth in Section 22.1 of the CAISO Tariff.

**25.4 Audit Rights Periods.**

**25.4.1 Audit Rights Period for Construction-Related Accounts and Records.** Accounts and records related to the design, engineering, procurement, and construction of Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades constructed by the Participating TO shall be subject to audit for a period of twenty-four months following the Participating TO's issuance of a final invoice in accordance with Article 12.2. Accounts and records related to the design, engineering, procurement, and construction of Participating TO's Interconnection Facilities and/or Stand Alone Network

Upgrades constructed by the Interconnection Customer shall be subject to audit and verification by the Participating TO and the CAISO for a period of twenty-four months following the Interconnection Customer's issuance of a final invoice in accordance with Article 5.2(8).

**25.4.2 Audit Rights Period for All Other Accounts and Records.** Accounts and records related to a Party's performance or satisfaction of all obligations under this LGIA other than those described in Article 25.4.1 shall be subject to audit as follows: (i) for an audit relating to cost obligations, the applicable audit rights period shall be twenty-four months after the auditing Party's receipt of an invoice giving rise to such cost obligations; and (ii) for an audit relating to all other obligations, the applicable audit rights period shall be twenty-four months after the event for which the audit is sought; provided that each Party's rights to audit the CAISO's accounts and records shall be as set forth in Section 22.1 of the CAISO Tariff.

**25.5 Audit Results.** If an audit by the Interconnection Customer or the Participating TO determines that an overpayment or an underpayment has occurred with respect to the other Party, a notice of such overpayment or underpayment shall be given to the other Party together with those records from the audit which supports such determination. The Party that is owed payment shall render an invoice to the other Party and such invoice shall be paid pursuant to Article 12 hereof.

**25.5.1** Notwithstanding anything to the contrary in Article 25.5, the Interconnection Customer's and Participating TO's rights to audit the CAISO's accounts and records shall be as set forth in Section 22.1 of the CAISO Tariff, and the CAISO's process for remedying an overpayment or underpayment shall be as set forth in the CAISO Tariff.

## **ARTICLE 26. SUBCONTRACTORS**

**26.1 General.** Nothing in this LGIA shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this LGIA; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this LGIA in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

**26.2 Responsibility of Principal.** The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this LGIA. The hiring Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the CAISO or Participating TO be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under Article 5 of this LGIA. Any applicable obligation imposed by this LGIA upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

**26.3 No Limitation by Insurance.** The obligations under this Article 26 will not be limited in any way by any limitation of subcontractor's insurance.

## **ARTICLE 27. DISPUTES**

All disputes arising out of or in connection with this LGIA whereby relief is sought by or from the CAISO shall be settled in accordance with the provisions of Article 13 of the CAISO Tariff, except that references to the CAISO Tariff in such Article 13 of the CAISO Tariff shall be read as references to this LGIA. Disputes arising out of or in connection with this LGIA not subject to provisions of Article 13 of the CAISO Tariff shall be resolved as follows:

**27.1 Submission.** In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with this LGIA or its performance, such Party (the “disputing Party”) shall provide the other Party with written notice of the dispute or claim (“Notice of Dispute”). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party’s receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this LGIA.

**27.2 External Arbitration Procedures.** Any arbitration initiated under this LGIA shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) Calendar Days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association (“Arbitration Rules”) and any applicable FERC regulations; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Article 27, the terms of this Article 27 shall prevail.

**27.3 Arbitration Decisions.** Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of this LGIA and shall have no power to modify or change any provision of this Agreement in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator(s) must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

**27.4 Costs.** Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

## **ARTICLE 28. REPRESENTATIONS, WARRANTIES AND COVENANTS**

**28.1 General.** Each Party makes the following representations, warranties and covenants:

**28.1.1 Good Standing.** Such Party is duly organized, validly existing and in good standing under the laws of the state in which it is organized, formed, or incorporated, as applicable; that it is qualified to do business in the state or states in which the Large Generating Facility, Interconnection Facilities and Network Upgrades owned by such Party, as applicable, are located; and that it has the corporate power and authority to own its properties, to carry on its business as now being conducted and to enter into this LGIA and carry out the transactions contemplated hereby and perform and carry

out all covenants and obligations on its part to be performed under and pursuant to this LGIA.

**28.1.2 Authority.** Such Party has the right, power and authority to enter into this LGIA, to become a Party hereto and to perform its obligations hereunder. This LGIA is a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).

**28.1.3 No Conflict.** The execution, delivery and performance of this LGIA does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Party, or any judgment, license, permit, order, material agreement or instrument applicable to or binding upon such Party or any of its assets.

**28.1.4 Consent and Approval.** Such Party has sought or obtained, or, in accordance with this LGIA will seek or obtain, each consent, approval, authorization, order, or acceptance by any Governmental Authority in connection with the execution, delivery and performance of this LGIA, and it will provide to any Governmental Authority notice of any actions under this LGIA that are required by Applicable Laws and Regulations.

## **ARTICLE 29. [RESERVED]**

## **ARTICLE 30. MISCELLANEOUS**

**30.1 Binding Effect.** This LGIA and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.

**30.2 Conflicts.** In the event of a conflict between the body of this LGIA and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this LGIA shall prevail and be deemed the final intent of the Parties.

**30.3 Rules of Interpretation.** This LGIA, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this LGIA, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this LGIA), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any Applicable Laws and Regulations means such Applicable Laws and Regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article of this LGIA or such Appendix to this LGIA, or such Section to the LGIP or such Appendix to the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this LGIA as a whole and not to any particular Article or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".

**30.4 Entire Agreement.** This LGIA, including all Appendices and Schedules attached hereto, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between or among the Parties with respect to the subject matter of this LGIA. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this LGIA.

**30.5 No Third Party Beneficiaries.** This LGIA is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.

**30.6 Waiver.** The failure of a Party to this LGIA to insist, on any occasion, upon strict performance of any provision of this LGIA will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this LGIA shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this LGIA. Termination or Default of this LGIA for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO. Any waiver of this LGIA shall, if requested, be provided in writing.

**30.7 Headings.** The descriptive headings of the various Articles of this LGIA have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this LGIA.

**30.8 Multiple Counterparts.** This LGIA may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

**30.9 Amendment.** The Parties may by mutual agreement amend this LGIA by a written instrument duly executed by all of the Parties. Such amendment shall become effective and a part of this LGIA upon satisfaction of all Applicable Laws and Regulations.

**30.10 Modification by the Parties.** The Parties may by mutual agreement amend the Appendices to this LGIA by a written instrument duly executed by all of the Parties. Such amendment shall become effective and a part of this LGIA upon satisfaction of all Applicable Laws and Regulations.

**30.11 Reservation of Rights.** The CAISO and Participating TO shall each have the right to make a unilateral filing with FERC to modify this LGIA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles and Appendices of this LGIA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these Articles and Appendices:

Recitals, 1, 2.1, 2.2, 2.3, 2.4, 2.6, 3.1, 3.3, 4.1, 4.2, 4.3, 4.4, 5 preamble, 5.4, 5.7, 5.8, 5.9, 5.12, 5.13, 5.18, 5.19.1, 7.1, 7.2, 8, 9.1, 9.2, 9.3, 9.5, 9.6, 9.7, 9.8, 9.10, 10.3, 11.4, 12.1, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24.3, 24.4, 25.1, 25.2, 25.3 (excluding subparts), 25.4.2, 26, 28, 29, 30, Appendix D, Appendix F, Appendix G, and any other Article not reserved exclusively to the Participating TO or the CAISO below.

The Participating TO shall have the exclusive right to make a unilateral filing with FERC to modify this LGIA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles and Appendices of



this LGIA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these Articles and Appendices:

2.5, 5.1, 5.2, 5.3, 5.5, 5.6, 5.10, 5.11, 5.14, 5.15, 5.16, 5.17, 5.19 (excluding 5.19.1), 6, 7.3, 9.4, 9.9, 10.1, 10.2, 10.4, 10.5, 11.1, 11.2, 11.3, 11.5, 12.2, 12.3, 12.4, 24.1, 24.2, 25.3.1, 25.4.1, 25.5 (excluding 25.5.1), 27 (excluding preamble), Appendix A, Appendix B, Appendix C, and Appendix E.

The CAISO shall have the exclusive right to make a unilateral filing with FERC to modify this LGIA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles of this LGIA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these Articles:

3.2, 4.5, 11.6, 25.3.2, 25.5.1, and 27 preamble.

The Interconnection Customer, the CAISO, and the Participating TO shall have the right to make a unilateral filing with FERC to modify this LGIA pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this LGIA shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

**30.12 No Partnership.** This LGIA shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership among the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.

**30.13 Joint and Several Obligations.** Except as otherwise provided in this LGIA, the obligations of the CAISO, the Participating TO, and the Interconnection Customer are several, and are neither joint nor joint and several.

**IN WITNESS WHEREOF,** the Parties have executed this LGIA in multiple originals, each of which shall constitute and be an original effective agreement among the Parties.

**[Insert name of Interconnection Customer]**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[Insert name of Participating TO]**

By: \_\_\_\_\_

Title:

Date:

**California Independent System Operator Corporation**

By:

Title:

Date:

**Appendices to LGIA**

Appendix A Interconnection Facilities, Network Upgrades and Distribution Upgrades

Appendix B Milestones

Appendix C Interconnection Details

Appendix D Security Arrangements Details

Appendix E Commercial Operation Date

Appendix F Addresses for Delivery of Notices and Billings

Appendix G Interconnection Customer's Proportional Share of Costs of Network Upgrades for  
Applicable Project Group

Appendix H Interconnection Requirements for a Wind Generating Plant

**Appendix A**  
**To LGIA**

**Interconnection Facilities, Network Upgrades and Distribution Upgrades**

**1. Interconnection Facilities:**

**(a) [insert Interconnection Customer's Interconnection Facilities]:**

**(b) [insert Participating TO's Interconnection Facilities]:**

**2. Network Upgrades:**

**(a) [insert Stand Alone Network Upgrades]:**

**(b) [insert Other Network Upgrades]:**

**(i) [insert Participating TO's Reliability Network Upgrades]**

**(ii) [insert Participating TO's Delivery Network Upgrades]**

**3. Distribution Upgrades:**

**Appendix B**  
**To LGIA**

**Milestones**

**Appendix C**  
**To LGIA**

**Interconnection Details**

**Appendix D**  
**To LGIA**

**Security Arrangements Details**

Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, all Participating TOs, market participants, and Interconnection Customers interconnected to the CAISO Controlled Grid to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

The Interconnection Customer shall meet the requirements for security implemented pursuant to the CAISO Tariff, including the CAISO's standards for information security posted on the CAISO's internet web site at the following internet address: <http://www.caiso.com/pubinfo/info-security/index.html>.

**Appendix E**  
**To LGIA**

**Commercial Operation Date**

[This Appendix E sets forth a form of letter to be provided by the Interconnection Customer to the CAISO and Participating TO to provide formal notice of the Commercial Operation of an Electric Generating Unit.]

**[Date]**

**[CAISO Address]**

**[Participating TO Address]**

Re: \_\_\_\_\_ Electric Generating Unit

Dear \_\_\_\_\_ :

On **[Date]** **[Interconnection Customer]** has completed Trial Operation of Unit No. \_\_\_\_\_. This letter confirms that **[Interconnection Customer]** commenced Commercial Operation of Unit No. \_\_\_\_\_ at the **Electric Generating Unit**, effective as of **[Date plus one day]** and that **[Interconnection Customer]** provided the CAISO's operations personnel advance notice of its intended Commercial Operation Date no less than five Business Days prior to that date.

Thank you.

**[Signature]**

**[Interconnection Customer Representative]**



**Appendix F**  
**To LGIA**

**Addresses for Delivery of Notices and Billings**

**Notices:**

Participating TO:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

CAISO:

[To be supplied.]

**Billings and Payments:**

Participating TO:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

CAISO:

[To be supplied.]

**Alternative Forms of Delivery of Notices (telephone, facsimile or e-mail):**

Participating TO:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

CAISO:

[To be supplied.]

**Appendix G**  
**To LGIA**

**Interconnection Customer's Proportional Share of Costs of Network Upgrades for Applicable Project Group**

**Appendix H**  
**To LGIA**

**INTERCONNECTION REQUIREMENTS FOR A WIND GENERATING PLANT**

Appendix H sets forth requirements and provisions specific to a wind generating plant. All other requirements of this LGIA continue to apply to wind generating plant interconnections.

**A. Technical Standards Applicable to a Wind Generating Plant**

**i. Low Voltage Ride-Through (LVRT) Capability**

A wind generating plant shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below.

All wind generating plants subject to FERC Order No. 661 must meet the following requirements:

1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 – 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the Participating TO. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the CAISO Controlled Grid. A wind generating plant shall remain interconnected during such a fault on the CAISO Controlled Grid for a voltage level as low as zero volts, as measured at the high voltage side of the wind GSU.
2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.
3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAR Compensator) within the wind generating plant or by a combination of generator performance and additional equipment.
5. Existing individual generator units that are, or have been, interconnected to the CAISO Controlled Grid at the same location at the effective date of the Appendix H LVRT Standard are exempt from meeting the Appendix H LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Appendix H LVRT Standard.

**ii. Power Factor Design Criteria (Reactive Power)**

A wind generating plant shall operate within a power factor within the range of 0.95 leading to 0.95 lagging, measured at the Point of Interconnection as defined in this LGIA in order to maintain a specified voltage schedule, if the Phase II Interconnection Study shows that such a requirement is necessary to ensure safety or reliability. The power factor range standard can be met by using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two, if agreed to by the Participating TO and CAISO. The Interconnection Customer shall not disable power

factor equipment while the wind plant is in operation. Wind plants shall also be able to provide sufficient dynamic voltage support in lieu of the power system stabilizer and automatic voltage regulation at the generator excitation system if the Phase II Interconnection Study shows this to be required for system safety or reliability.

**iii. Supervisory Control and Data Acquisition (SCADA) Capability**

The wind plant shall provide SCADA capability to transmit data and receive instructions from the Participating TO and CAISO to protect system reliability. The Participating TO and CAISO and the wind plant Interconnection Customer shall determine what SCADA information is essential for the proposed wind plant, taking into account the size of the plant and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

\* \* \*

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

**California Independent System     ) Docket No. ER08-\_\_\_\_-000  
Operator Corporation             )**

**CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION  
GENERATION INTERCONNECTION PROCESS REFORM  
TARIFF AMENDMENT**

**VOLUME 4 OF 4**

**INFORMATIONAL COMPARISON DOCUMENTS**

**July 28, 2008**



**Attachment D2 – Blacklines**<sup>1</sup>

**Generation Interconnection Process Reform Amendment Filing**<sup>2</sup>

**4<sup>th</sup> Replacement MRTU Tariff**<sup>3</sup>



\*\*\*<sup>4</sup>

**CAISO TARIFF APPENDIX U<sup>5</sup>Y<sup>6</sup>**

**Standard<sup>7</sup> Large Generator Interconnection Procedures (LGIP)  
for Interconnection Requests in a Queue Cluster Window<sup>8</sup>**

**Standard<sup>9</sup> Large Generator  
Interconnection Procedures (LGIP)**

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## Section 1.<sup>220, 221</sup> **1** Objectives and Definitions.

### 1.1 Objectives and Applicability.<sup>222</sup>

The objective of this LGIP is to implement FERC's Order No. 2003 setting forth<sup>223</sup> the requirements for Large Generating Facility interconnections to the CAISO Controlled Grid. **This LGIP applies to Interconnection Requests assigned to a Queue Cluster Window pursuant to the terms of this CAISO Tariff for the performance of its Interconnection Studies**<sup>224</sup>.

### 1.2 Definitions.

#### 1.2.1 Master Definitions Supplement.

Unless the context otherwise requires, any word or expression defined in the Master Definitions Supplement, Appendix A to the CAISO Tariff, shall have the same meaning where used in this LGIP. A reference to a Section or an Appendix is a reference to a Section or an Appendix of the CAISO Tariff.<sup>225</sup> References to LGIP are to this Appendix U<sup>226, 227</sup>.

#### 1.2.2 Special Definitions for this LGIP.

In this LGIP, the following words and expressions shall have the meanings set opposite them:

**"Confidential Information"** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, subject to Section 13.1 of this LGIP.

**"Dispute Resolution"** shall mean the procedure set forth in this LGIP for resolution of a dispute between the Parties.

**"Force Majeure"** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**"Governmental Authority"** shall mean any federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, CAISO, or Participating TO, or any Affiliate thereof.

**"Party" or "Parties"** shall mean the CAISO, Participating TO(s), Interconnection Customer or the applicable combination of the above.

**"Reasonable Efforts"** shall mean, with respect to an action required to be attempted or taken by a Party under the Standard<sup>228</sup> Large Generator Interconnection Procedures, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.



“Roles and Responsibilities Agreement” shall mean the Agreement for the Allocation of Responsibilities with Regard to Large Generator Interconnection Procedures and Interconnection Study Agreements, a *pro forma*<sup>229</sup> version of which is attached to this LGIP.

## **Section 2.**<sup>230,231</sup> **Scope and Application.**

### **2.1 Application of Standard**<sup>232</sup> **Large Generator Interconnection Procedures.**

Sections 2 through 13 of this LGIP apply to processing an Interconnection Request pertaining to a Large Generating Facility.<sup>233</sup> **Generating Facility assigned to a Queue Cluster Window pursuant to the terms of this CAISO Tariff for the performance of its Interconnection Studies. Appendix 2 of this LGIP sets forth exceptions to the provisions of this LGIP that apply to processing an Interconnection Request pertaining to a Generating Facility that meets the criteria set forth in LGIP Appendix 2.**<sup>234</sup>

### **2.2 Comparability.**

The CAISO shall receive, process,<sup>235</sup> and analyze Interconnection Requests in a timely manner as set forth in this LGIP. The CAISO will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers **as set forth in this LGIP**<sup>236</sup>, whether the Generating Facilities are owned by a Participating TO, its subsidiaries, or Affiliates or others.

### **2.3 Interconnection**<sup>237</sup> **Base Case Data.**

The CAISO and/or the<sup>238</sup> **For each Interconnection Study Cycle, the CAISO**<sup>239</sup>, in coordination with<sup>240</sup> applicable Participating TO(s) shall provide base power flow, short circuit and stability databases, including all underlying assumptions, and contingency list upon request subject to applicable<sup>241</sup>, **shall publish updated Interconnection Base Case Data, including, as applicable, separate Interconnection Base Case Data for each Group Study to reflect system conditions particular to the Group Study, to a secured section of the CAISO Website: (1) prior to the Phase I Interconnection Study with the Generation reflected in valid Interconnection Requests submitted in the Queue Cluster Window for the Interconnection Study Cycle; (2) after the Phase I Interconnection Study with the Generation reflected in valid Interconnection Requests submitted in the Queue Cluster Window for the Interconnection Study Cycle, and the identified preliminary transmission upgrades or additions, (3) prior to the Phase II Interconnection Study, including all remaining Generation from the Phase I Interconnection Study for the Interconnection Study Cycle; and (4) after the Phase II Interconnection Study, including all remaining Generation from the applicable Phase I Interconnection Study and the identified transmission upgrades and additions for the Interconnection Study Cycle.**<sup>242</sup>

**Interconnection Base Case Data shall not include information subject to the**<sup>243</sup> confidentiality provisions in LGIP Section 13.1. The applicable Participating TO(s) and the CAISO are permitted to require that the<sup>244</sup>

**The CAISO shall require current and former Interconnection Customers, Market Participants, and electric utility regulatory agencies within California to sign a CAISO confidentiality agreement and, where the current or former**<sup>245</sup> Interconnection Customer sign a confidentiality agreement before the release of commercially sensitive information or<sup>246</sup> **or Market Participant is not a member of WECC, or its successor,**

**an appropriate form of agreement with WECC, or its successor, as necessary. All other entities or persons seeking Interconnection Base Case Data must satisfy the foregoing requirements as well all requirements under 18 C.F.R. Section 388.113 for obtaining the release of**<sup>247</sup> Critical Energy Infrastructure Information (as that term is defined by FERC) in the Base Case data. Such Base Cases shall include (i) generation projects and (ii) transmission projects, including merchant transmission projects that are proposed for the transmission system for which a transmission expansion plan has been submitted and approved by the applicable authority<sup>248</sup>.

## **2.4 Interconnection Service and Studies.**<sup>249</sup>

### **2.4.1**<sup>250</sup> **No Applicability to Transmission Service.**

Nothing in this LGIP shall constitute a request for transmission service or confer upon an Interconnection Customer any right to receive transmission service.

## **Section 3. Interconnection Requests.**<sup>251</sup>

### **2.4.2 The Product.**<sup>252</sup>

Interconnection Service allows the Interconnection Customer to connect the Large Generating Facility to the CAISO Controlled Grid and be eligible to deliver the Large Generating Facility's output using the available capacity of the CAISO Controlled Grid. Interconnection Service does not in and of itself convey any right to deliver electricity to any specific customer or point of delivery<sup>253</sup> **or rights to any specific MW of available capacity on the CAISO Controlled Grid.**<sup>254</sup>

### **2.4.3 The Interconnection Studies.**<sup>255</sup>

**The Interconnection Studies consist of a Phase I Interconnection Study and a Phase II Interconnection Study, which will include, but not be**<sup>256</sup> limited to, short circuit/fault duty, steady state (thermal and voltage) and stability analyses. The Interconnection Studies will identify direct Interconnection Facilities and required Reliability Network Upgrades necessary to mitigate thermal overloads and voltage violations, and address short circuit, stability, and reliability issues associated with the requested Interconnection Service.<sup>257</sup>

**The Interconnection Studies will also identify Delivery Network Upgrades to allow the full output of a Large Generating Facility selecting Full Capacity Deliverability Status, and, as applicable, the maximum allowed output of the interconnecting Large Generating Facility without one or more Delivery Network Upgrades in accordance with the On-Peak Deliverability Assessment and Off-Peak Deliverability Assessment set forth in LGIP Section 6.3.2.**<sup>258</sup>

## **Section 3 Interconnection Requests.**<sup>259</sup>

### **3.1 General.**

Pursuant to CAISO Tariff Section 25.1, an Interconnection Customer shall submit to the CAISO an Interconnection Request in the form of Appendix 1 to this LGIP and a refundable deposit of \$10,000.<sup>260 261</sup> The CAISO will forward a copy of the Interconnection Request to the applicable Participating TO within ~~one~~<sup>262</sup> **three**<sup>263</sup>

(4<sup>264</sup>~~3~~<sup>265</sup>) Business Day<sup>266</sup> **Days**<sup>267</sup> of receipt. The CAISO shall apply the deposit toward the cost of an Interconnection Feasibility Study<sup>268</sup>.

The Interconnection Customer shall submit a separate Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. The Interconnection Customer must submit a deposit with each Interconnection Request even when more than one request is submitted for a single site. An Interconnection Request to evaluate one site at two different voltage levels shall be treated as two Interconnection Requests.

~~At the Interconnection Customer's option, the applicable Participating TO(s), the CAISO and Interconnection Customer will identify alternative Point(s) of Interconnection and configurations at the Scoping Meeting to evaluate in this process and attempt to eliminate alternatives in a reasonable fashion given resources and information available. Interconnection Customer will select the definitive Point of Interconnection to be studied and one alternative Point of Interconnection no later than the execution of the first Interconnection Feasibility Study Agreement.~~<sup>269</sup>

### **3.2 Roles and Responsibilities.**

- (a) Each Interconnection Request will be subject to the direction and oversight of the CAISO. The CAISO will conduct or cause to be performed the required Interconnection Studies and any additional studies the CAISO determines to be reasonably necessary, and will direct the applicable Participating TO to perform portions of studies where the Participating TO has specific and non-transferable expertise or data and can conduct the studies more efficiently and cost effectively than the CAISO. The CAISO will coordinate with Affected System Operators in accordance with LGIP Section 3.7.
- (b) The CAISO will complete or cause to be completed all studies as required within the timelines provided in this LGIP. Any portion of the studies performed at the direction of the CAISO by the Participating TOs or by a third party shall also be completed within timelines provided in this LGIP.
- (c) The CAISO has established a *pro forma*<sup>270</sup> Roles and Responsibilities Agreement, attached hereto **as Appendix 4**<sup>271</sup> and incorporated herein by reference, for execution by the CAISO and the applicable Participating TOs.
- (d) Each Interconnection Customer shall pay the actual costs of all Interconnection Studies, and any additional studies the CAISO determines to be reasonably necessary in response to the Interconnection Request. The CAISO shall reimburse the Participating TO for the actual cost of any portion of all Interconnection Studies that such Participating TO performs at the direction of the CAISO.

### ~~**3.3 Interconnection Service.**~~<sup>272</sup>

~~**3.3.1 The Product.**~~<sup>273</sup> Interconnection Service allows the Interconnection Customer to connect the Large Generating Facility to the CAISO Controlled Grid and be eligible to deliver the Large Generating Facility's output using the available capacity of the CAISO Controlled Grid. Interconnection Service does not in and of itself convey any right to deliver electricity to any specific customer or point of delivery<sup>274 275</sup>.

~~**3.3.2 The Interconnection Studies.**~~ The Interconnection Studies consist of, but are not<sup>276</sup> limited to, short circuit/fault duty, steady state (thermal and voltage) and stability analyses. The Interconnection Studies will identify direct Interconnection Facilities and

required Reliability Network Upgrades necessary to mitigate thermal overloads and voltage violations, and address short circuit, stability, and reliability issues associated with the requested Interconnection Service.<sup>277</sup>

The Interconnection Studies will also identify necessary Delivery Network Upgrades to allow full output of the proposed Large Generating Facility under a variety of potential system conditions, and the maximum allowed output, under a variety of potential system conditions, of the interconnecting Large Generating Facility without the Delivery Network Upgrades.<sup>278</sup>

### **3.3.3 Deliverability Assessment.**<sup>279</sup>

**3.3.3.1 The Product.** A Deliverability Assessment will be performed which shall determine the Interconnection Customer's Large Generating Facility's ability to deliver its energy to the CAISO Controlled Grid under peak load conditions. The Deliverability Assessment will provide the Interconnection Customer with information as to the level of deliverability without Network Upgrades, and the Deliverability Assessment will provide the Interconnection Customer with information as to the required Network Upgrades to enable the Interconnection Customer's Large Generating Facility the ability to deliver the full output of the proposed Large Generating Facility to the CAISO Controlled Grid based on specified study assumptions.<sup>280</sup>

Thus, the Deliverability Assessment results will provide the Interconnection Customer two (2) data points on the scale of deliverability: 1) a deliverability level with no Network Upgrades, and 2) the required Network Upgrades to support 100% deliverability.<sup>281</sup>

Deliverability of a new Large Generating Facility will be assessed on the same basis as all other existing resources interconnected to the CAISO Controlled Grid.<sup>282</sup>

**3.3.3.2 The Assessment.**<sup>283</sup> The Deliverability Assessment will identify the facilities that are required to enable the Interconnection Customer's Large Generating Facility to meet the requirements for deliverability and as a general matter, that such Large Generating Facility's interconnection is also studied with the CAISO Controlled Grid at peak load, under a variety of severely stressed conditions, to determine whether, with the Large Generating Facility at full output, the aggregate of generation in the local area<sup>285</sup> can be delivered to the aggregate of<sup>286</sup> load on the CAISO Controlled Grid, consistent with the CAISO's reliability criteria and procedures. This approach assumes that some portion of existing resources that are designated as deliverable is displaced by the output of the Interconnection Customer's Large Generating Facility. This Deliverability Assessment in and of itself<sup>287</sup> does not convey any right to deliver electricity to any specific customer<sup>288</sup> or point of delivery. The CAISO Controlled Grid may also be studied under non-peak load conditions. However, upon request by the Interconnection Customer, the Deliverability Assessment must explain in writing to the Interconnection Customer why the study of non-peak load conditions is required for reliability purposes.<sup>289</sup>

### **3.4 Network Upgrades.**<sup>290</sup>

#### **3.4.1 Initial Funding**<sup>291</sup>

Unless the Participating TO elects to fund the capital for Reliability and Delivery Network Upgrades, they shall be solely funded by the Interconnection Customer.<sup>292</sup>

#### **3.4.2 [Section Intentionally Omitted]**<sup>293</sup>

### **3.4.3 Repayment of Amounts Advanced for Network Upgrades.**<sup>294</sup>

Upon the Commercial Operation Date<sup>295</sup>, the Interconnection Customer shall be entitled to a repayment for the<sup>296</sup> cost of Network Upgrades.<sup>297</sup> Such amount shall be paid to the Interconnection Customer by the applicable Participating TO(s) on a dollar-for-dollar basis either through (1) direct payments made on a levelized basis over the five-year period commencing on the<sup>298</sup> Commercial Operation Date; or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years of the Commercial Operation Date. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment. The Interconnection Customer may assign such repayment rights to any person.<sup>299</sup>

Instead of direct payments, the Interconnection Customer may elect to receive<sup>300</sup> Congestion Revenue Rights (CRRs) in accordance with<sup>301</sup> the CAISO Tariff associated with the Network Upgrades that were funded by the Interconnection Customer, to the extent such CRRs or alternative rights are available under the CAISO Tariff at the time of the election. Such CRRs would take effect upon the Commercial Operation Date of the Large Generating Facility in accordance with the LGIA.<sup>302</sup>

### **3.3 Queue Cluster Windows.**<sup>303</sup>

#### **3.4.4<sup>304</sup> Special Provisions for Affected Systems and Other Affected Participating TOs.**<sup>305</sup>

**Interconnection Requests must be submitted during a Queue Cluster Window. Separate Queue Cluster Windows shall be established as follows: (i) as provided for in LGIP Appendix 2, Section 1.1; (ii) opening on June 2, 2008 and closing on July 31, 2009; (iii) opening on October 1, 2009 and closing on January 31, 2010; and (iv) thereafter, each calendar year shall have two Queue Cluster Windows with opening and closing dates as set forth in the Business Practice Manual.**<sup>306</sup>

The Interconnection Customer shall enter into an agreement with the owner of the Affected System and/or other affected Participating TO(s), as applicable. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to the owner of the Affected System and/or other affected Participating TO(s) as well as the repayment by the owner of the Affected System and/or other affected Participating TO(s). If the affected entity is another Participating TO, the initial form of agreement will be the LGIA, as appropriately modified.<sup>307</sup>

**Any changes to the Queue Cluster Window interval and opening or closing dates set forth in the Business Practice Manual shall be made in accordance with CAISO Tariff Section 22.11.**<sup>308</sup>

Any repayment by the owner of the Affected System shall be in accordance with FERC Order No. 2003-B (109 FERC ¶ 61,287).<sup>309</sup>

### **3.4 [NOT USED]**<sup>310</sup>

### **3.5 Valid<sup>311</sup> Processing of<sup>312</sup> Interconnection Request.**

#### **3.5.1 Initiating an Interconnection Request.**

To initiate an Interconnection Request, **except as set forth in LGIP Section 3.5.1.1,**<sup>313</sup> the Interconnection Customer must submit **during a Queue Cluster Window**<sup>314</sup> all of the following: (i) a \$40,000 deposit<sup>315</sup> **250,000 Interconnection Study Deposit**<sup>316</sup>, (ii) a completed application in the form of LGIP Appendix 1, **including requested deliverability status, preferred Point of Interconnection and voltage level, and all other required technical data,**<sup>317</sup> and (iii) demonstration of Site Control<sup>318</sup> **Exclusivity**<sup>319</sup> or a posting of an additional deposit of \$10,000. Such deposits may be applied toward any Interconnection Studies pursuant to the Interconnection Request. If the Interconnection Customer demonstrates Site Control within the cure period specified in LGIP Section 3.5.3 after submitting its Interconnection Request, the additional deposit shall be refundable; otherwise, all such deposit(s), additional and initial, become non-refundable.<sup>320</sup> **a Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity, at a minimum, must be through the Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility.**<sup>321</sup>

### **3.5.1.1 Initiating an Interconnection Request for Certain Small and Existing Generating Facilities.**<sup>322</sup>

**An Interconnection Customer submitting an Interconnection Request relating to (a) a Small Generating Facility seeking a Deliverability Assessment or (b) a Generating Facility, subject to the LGIP in accordance with CAISO Tariff Section 25.1.1, that has achieved Commercial Operation prior to the date of the Interconnection Request, and is seeking to increase the capacity of the Generating Facility by less than 20 MW, must submit during a Queue Cluster Window all of the following: (i) a \$100,000 Interconnection Study Deposit, (ii) a completed application in the form of LGIP Appendix 1, including requested deliverability status, preferred Point of Interconnection and voltage level, and all other required technical data, and (iii) demonstration of Site Exclusivity, which for a Generation Facility under (b) above shall be Site Exclusivity sufficient to accommodate the added capacity, or a posting of an additional Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity, at a minimum, must be through the Commercial Operation Date of the new Generating Facility or increase in capacity of the existing Generating Facility.**<sup>323</sup>

### **3.5.1.2 Use of Interconnection Study Deposit.**<sup>324</sup>

**The CAISO shall deposit all Interconnection Study Deposits in an interest bearing account at a bank or financial institution designated by the CAISO. The Interconnection Study Deposit shall be applied to pay for prudent costs incurred by the CAISO, the Participating TOs, or third parties at the direction of the CAISO or Participating TOs, as applicable, to perform and administer the Interconnection Studies.**<sup>325</sup>

**The Interconnection Study Deposits shall be refundable as follows:**<sup>326</sup>

- (a) **Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under LGIP Section 3.8 on or before thirty (30) calendar days following the Scoping Meeting, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that**

exceed the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.<sup>327</sup>

- (b) Should an Interconnection Request made under LGIP Section 3.5.1 be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under LGIP Section 3.8 more than thirty (30) calendar days after the Scoping Meeting, but on or before thirty (30) calendar days following the Results Meeting for the Phase I Interconnection Study, the CAISO shall refund to the Interconnection Customer the difference between (i) the Interconnection Customer's Interconnection Study Deposit and (ii) the greater of the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf or \$100,000, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal.<sup>328</sup>
- (c) Should an Interconnection Request made under LGIP Section 3.5.1.1 be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under LGIP Section 3.8 more than thirty (30) calendar days after the Scoping Meeting, but on or before thirty (30) calendar days following the Results Meeting for the Phase I Interconnection Study, the CAISO shall refund to the Interconnection Customer the difference between (i) the Interconnection Customer's Interconnection Study Deposit and (ii) the greater of the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf or \$50,000, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal.<sup>329</sup>
- (d) Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under LGIP Section 3.8 at any time more than thirty (30) calendar days after the Results Meeting for the Phase I Interconnection Study, the Interconnection Study Deposit shall be non-refundable.<sup>330</sup>
- (e) Upon execution of an LGIA by an Interconnection Customer, the CAISO and the applicable Participating TOs, or the approval by FERC of an unexecuted LGIA, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceeds the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.<sup>331</sup>

Notwithstanding the foregoing, an Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request during an Interconnection Study Cycle shall be obligated to pay to the CAISO all costs in excess of the Interconnection Study Deposit that have been prudently incurred or irrevocably have been committed to be incurred with respect to that Interconnection Request prior to withdrawal. The CAISO will reimburse the applicable Participating TO(s) or third parties, as applicable, for all work performed on behalf of the withdrawn Interconnection Request at the CAISO's direction. The Interconnection Customer must pay all monies due before it is allowed to obtain any Interconnection Study data or results.<sup>332</sup>

**All non-refundable portions of the Interconnection Study Deposit that exceed the costs the CAISO, Participating TOs, or third parties have incurred on the Interconnection Customer's behalf shall be treated in accordance with CAISO Tariff Section 37.9.4.**<sup>333</sup>

**3.5.1.3 Obligation for Study Costs.**<sup>334</sup>

**Except as otherwise provided in LGIP Section 3.5.1.2, the CAISO shall charge and the Interconnection Customer(s) shall pay the actual costs of the Interconnection Studies. Where an Interconnection Study is performed by means of a Group Study, the cost of the Group Study will be charged pro rata to each Interconnection Request assigned to the Group Study. The cost of Interconnection Studies performed for an individual Interconnection Request, not part of a Group Study, will be charged solely to the Interconnection Customer that submitted the Interconnection Request.**<sup>335</sup>

**The CAISO shall issue invoices for Interconnection Studies that shall include a detailed and itemized accounting of the cost of each Interconnection Study. The CAISO shall draw from the Interconnection Study Deposit any undisputed costs within thirty (30) calendar days of issuance of an invoice. Whenever the actual cost of performing the Interconnection Studies exceeds the Interconnection Study Deposit, the Interconnection Customer shall pay the undisputed difference in accordance with the CAISO issued invoice within thirty (30) calendar days. The CAISO shall not be obligated to continue to have any studies conducted unless the Interconnection Customer has paid all undisputed amounts in compliance herewith. In the event an Interconnection Study, or portions thereof, is performed by the CAISO, the Interconnection Customer shall pay only the costs of those activities performed by the Participating TO to adequately review or validate that Interconnection Study or portions thereof.**<sup>336</sup>

**3.5.1.4 Use of Site Exclusivity Deposit.**<sup>337</sup>

**The CAISO shall deposit all Site Exclusivity Deposits in an interest bearing account at a bank or financial institution designated by the CAISO. The Site Exclusivity Deposit shall be refundable to the Interconnection Customer at any time upon demonstration of Site Exclusivity or the Interconnection Request is withdrawn by the Interconnection Customer or deemed withdrawn by the CAISO by written notice under LGIP Section 3.8. The refund of the Site Exclusivity Deposit shall include interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal. The Site Exclusivity Deposit shall continue to be required after the Interconnection Customer either executes an LGIA or requests the filing of an unexecuted LGIA under LGIP Section 11 if Site Exclusivity has not been demonstrated.**<sup>338</sup>

**3.5.1.5 Proposed Commercial Operation Date.**<sup>339</sup>

The expected In-Service<sup>340</sup> **proposed Commercial Operation**<sup>341</sup> Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility shall be no more than the process window for the regional expansion planning period (or in the absence of a regional planning process, the process window for the CAISO's expansion planning period) not to<sup>342</sup> **not**<sup>343</sup> exceed seven years from the date the Interconnection Request is received by the CAISO, unless the Interconnection Customer demonstrates,<sup>344</sup> **and**<sup>344</sup> the applicable Participating TO<sup>345</sup> **(s)**<sup>346</sup> and the CAISO agree, such agreement not to be unreasonably withheld<sup>347</sup> **,**<sup>348</sup> that engineering, permitting and construction of the



new Large Generating Facility or increase in capacity of the existing Generating Facility will take longer than the regional expansion planning period. The In-Service Date may succeed the date the Interconnection Request is received by the CAISO by a period up to ten years, or longer where the Interconnection Customer,<sup>349</sup> the applicable Participating TO<sup>350</sup> and the CAISO agree, such agreement not to be unreasonably withheld<sup>351</sup> **seven year period**<sup>352</sup>.

### **3.5.2 Validation of Interconnection Request.**<sup>353</sup>

#### **3.5.2.1**<sup>354</sup> **Acknowledgment of Interconnection Request.**

The CAISO shall acknowledge receipt of<sup>355</sup> **notify**<sup>356</sup> the Interconnection Request<sup>357</sup> **Customer**<sup>358</sup> within six (6) Business Days of receipt of the request and attach a copy of the received<sup>359</sup> Interconnection Request to the acknowledgement<sup>360</sup> **which notice shall state whether the Interconnection Request is deemed valid**<sup>361</sup>.

#### **3.5.3**<sup>362</sup> **3.5.2.2**<sup>363</sup> **Deficiencies in Interconnection Request.**

An Interconnection Request will not be considered to be a valid request until all items in LGIP Section 3.5.1 have been received and deemed valid by the CAISO. If an Interconnection Request fails to meet the requirements set forth in LGIP Section 3.5.1, the CAISO shall notify<sup>364</sup> **include in its notification to**<sup>365</sup> the Interconnection Customer within six (6<sup>366</sup>) Business Days of receipt of the<sup>367</sup> initial Interconnection Request of<sup>368</sup> **under LGIP Section 3.5.2.1**<sup>369</sup> the reasons for such failure and that the Interconnection Request does not constitute a valid request. The Interconnection Customer shall provide the CAISO the additional requested information needed to constitute a valid request within ten (10) Business Days after receipt of such notice. Failure<sup>370</sup> **Whenever additional requested information is provided**<sup>371</sup> by the Interconnection Customer to comply with this LGIP Section 3.5.3 shall be treated in accordance with LGIP Section 3.8.<sup>372</sup> **the CAISO shall**<sup>373</sup> **notify**<sup>374</sup> **the Interconnection Customer within three (3**<sup>375</sup>**) Business Days of receipt of the**<sup>376</sup> **additional requested information whether the Interconnection Request is valid. If the Interconnection Request continues to fail to meet the requirements set forth in LGIP Section 3.5.1, the CAISO shall include in its notification to the Interconnection Customer the reasons for such failure. If an Interconnection Request has not been deemed valid, the Interconnection Customer must submit all information necessary to meet the requirements of LGIP Section 3.5.1 no later than twenty (20) calendar days after the close of the applicable Queue Cluster Window or ten (10) calendar days after the CAISO first provided notice that the Interconnection Request was not valid, whichever is later. Interconnection Requests that have not met the requirements of LGIP Section 3.5.1 within twenty (20) calendar days after the close of the applicable Queue Cluster Window or ten (10) calendar days after the CAISO first provided notice that the Interconnection Request was not valid, whichever is later, will not be included in Interconnection Study Cycle and will be deemed invalid.**<sup>377</sup>

#### **3.5.4 Scoping Meeting.**<sup>378</sup>

Within ten (10) Business Days after the CAISO notifies the Interconnection Customer of a valid Interconnection Request, the CAISO shall establish a date agreeable to the Interconnection Customer and the applicable Participating TO(s) for the Scoping Meeting, and such date shall be no later than thirty (30) calendar days from notification of the valid Interconnection Request<sup>379</sup>, unless otherwise mutually agreed upon by the Parties. The

CAISO shall determine whether the Interconnection Request is at or near the boundary of an affected Participating TO(s) service territory or of any other Affected System(s) so as to potentially affect such third parties. If such a determination is made, the CAISO shall invite the affected Participating TO(s), and/or Affected System Operator(s) in accordance with LGIP Section 3.7, to the Scoping Meeting by informing such third parties of the time and place of the scheduled Scoping Meeting as soon as practicable.<sup>380</sup>

The purpose of the Scoping Meeting shall be to discuss<sup>381</sup> alternative interconnection options, to exchange information including any transmission data that would reasonably be expected to impact such interconnection options, to analyze such information and to determine the potential feasible Points of Interconnection<sup>382</sup>. The applicable Participating TO(s) and the CAISO will bring to the meeting such already available technical data, including, but not limited to:<sup>383</sup> (i) general facility loadings, (ii) general instability issues, (iii) general short circuit issues, (iv) general voltage issues, and (v) general reliability issues,<sup>384</sup> as may be reasonably required to accomplish the purpose of the meeting.<sup>385</sup>

The Interconnection Customer will bring to the Scoping Meeting as much large generator technical data in Attachment A to LGIP Appendix 1, and system studies previously performed, as available.<sup>386</sup> The applicable Participating TO(s), the CAISO and the Interconnection Customer will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. On the basis of the meeting, the Interconnection Customer shall designate its Point of Interconnection<sup>387</sup>, pursuant to LGIP Section 6.1, and one alternative Point of Interconnection<sup>388</sup>. The duration of the meeting shall be sufficient to accomplish its purpose.<sup>389</sup>

The CAISO shall prepare minutes from the meeting, verified by the Interconnection Customer and the other attendees, that will include, at a minimum, discussions among the applicable Participating TO(s) and the CAISO of<sup>390</sup> what the expected results may be for the Interconnection Feasibility Study.<sup>391</sup>

**Interconnection Requests deemed invalid under this LGIP Section 3.5.2.2 are not subject to LGIP Section 3.8. Interconnection Customers with invalid Interconnection Request under this LGIP Section 3.5.2.2 may seek relief under LGIP Section 13.5 by so notifying the CAISO within two (2) Business Days of the notice of invalidity.**<sup>392</sup>

### 3.6 Internet Posting.

The CAISO will maintain on the CAISO Website a list of all Interconnection Requests. The list will identify, for each Interconnection Request: (i) the maximum summer and winter megawatt electrical output; (ii) the location by county and state; (iii) the station or transmission line or lines where the interconnection will be made; (iv) the **most recent**<sup>393</sup> projected In-Service<sup>394</sup> **Commercial Operation**<sup>395</sup> Date; (v) the status of the Interconnection Request, including Queue Position<sup>396</sup> **whether it is active or withdrawn**<sup>397</sup>; (vi) the availability of any studies related to the Interconnection Request; (vii) the date of the Interconnection Request; (viii) the type of Generating Facility to be constructed (**e.g.,**<sup>398</sup> combined cycle, base load or<sup>399</sup> combustion turbine, **wind turbine,**<sup>400</sup> and fuel type); and (ix) for Interconnection Requests that have not resulted in a completed interconnection, an explanation as to why it was not completed<sup>401</sup> **requested deliverability status**<sup>402</sup>.

Except in the case of an Affiliate, the list will not disclose the identity of the Interconnection Customer until the Interconnection Customer executes an LGIA or requests that the applicable Participating TO(s) and the CAISO file an unexecuted LGIA with FERC. The CAISO shall post on the CAISO Website an advance notice whenever a Scoping Meeting will be held with an Affiliate of a Participating TO.

The CAISO shall post to the CAISO Website any deviations from the study timelines set forth herein. **The CAISO shall further post to the CAISO Website non-confidential portions of the Phase I**<sup>403</sup> Interconnection Study reports and Optional Interconnection Study reports shall be posted to the CAISO Website subsequent to the meeting among the Interconnection Customer, the applicable Participating TO(s) and the CAISO to discuss the applicable study results. The CAISO shall also post any known deviations in the Large Generating Facility's In-Service Date. **following the final Results Meeting and non-confidential portions of the Phase II Interconnection Study no later than publication of the final Transmission Plan under CAISO Tariff Section 24.2.5.2.**<sup>405</sup>

### 3.7 Coordination with Affected Systems.

The CAISO will notify the Affected System Operators that are potentially affected by the project proposed by <sup>406</sup> **Interconnection Customer's Interconnection Request or Group Study within which**<sup>407</sup> the Interconnection Customer's **Interconnection Request will be studied**<sup>408</sup>. The CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System Operators, to the extent possible, and, if possible, the CAISO will include those results (if available) in its applicable Interconnection Study within the time frame specified in this LGIP. The CAISO will include such Affected System Operators in all meetings held with the Interconnection Customer as required by this LGIP. The Interconnection Customer will cooperate with the CAISO in all matters related to the conduct of studies and the determination of modifications to Affected Systems, including signing separate study agreements with Affected System owners and paying for necessary studies. An entity which may be an Affected System shall cooperate with the CAISO in all matters related to the conduct of studies and the determination of modifications to Affected Systems.

### 3.8 Withdrawal.

The Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to the CAISO,<sup>409</sup> and the CAISO will notify the applicable Participating TO(s) **and Affected System Operators, if any**<sup>410</sup>, within three (3) Business Days of receipt of such a notice. In addition, **after confirmation by the CAISO of a valid Interconnection Request under LGIP Section 3.5.2,**<sup>411</sup> if the Interconnection Customer fails to adhere to all requirements of this LGIP, except as provided in LGIP Section 13.5 (Disputes), the CAISO shall deem the Interconnection Request to be withdrawn and shall provide written notice to the Interconnection Customer within five (5) Business Days of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Upon receipt of such written notice, the Interconnection Customer shall have ~~fifteen~~<sup>412</sup> **five**<sup>413</sup> (45<sup>414</sup> **5**<sup>415</sup>) Business Days in which to ~~either~~<sup>416</sup> respond with information or actions<sup>417</sup> **action**<sup>418</sup> that ~~either~~<sup>419</sup> cures the deficiency or to ~~notify~~<sup>420</sup> **supports its position that the deemed withdrawal was erroneous and notifies**<sup>421</sup> the CAISO of its intent to pursue Dispute Resolution.

Withdrawal shall result in the ~~loss~~<sup>422</sup> **removal**<sup>423</sup> of the Interconnection Customer's Queue Position, if any<sup>424</sup> **Request from the Interconnection Study Cycle**<sup>425</sup>. If an

Interconnection Customer disputes the withdrawal and loss of its Queue Position, then during<sup>426</sup> **removal from the Interconnection Study Cycle and has elected to pursue**<sup>427</sup> Dispute Resolution, the Interconnection Customer's Interconnection Request is eliminated from the queue until such time that the outcome of<sup>428</sup> **will not be considered in any ongoing Interconnection Study during the**<sup>429</sup> Dispute Resolution would restore its Queue Position. An Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request shall pay to the CAISO all costs that have been prudently incurred or irrevocably have been committed to be incurred with respect to that Interconnection Request prior to the CAISO's receipt of notice described above. The Interconnection Customer must pay all monies due to the Participating TO before it is allowed to obtain any Interconnection Study data or results. The CAISO will reimburse the applicable Participating TO(s) for all work performed associated with the Interconnection Request at the CAISO's direction.<sup>430</sup> **process.**<sup>431</sup>

The CAISO shall update the CAISO Website Queue Position posting. The CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's deposit or study payments that exceed the costs that the CAISO has incurred or Participating TO(s) have incurred, including interest calculated in accordance with section 35.19a(a)(2) of FERC's regulations.<sup>432</sup> In the event of such withdrawal, the CAISO, subject to the confidentiality<sup>433</sup> provisions of LGIP Section 13.1,<sup>434</sup> **Sections 13.1 and 3.5.1.2.**<sup>435</sup> shall provide, at the Interconnection Customer's request, all information that the CAISO developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.

### **3.9 Transferability of Interconnection Request**<sup>436 437</sup>

An Interconnection Customer may transfer its<sup>438</sup> **Interconnection Request**<sup>439</sup> to another entity only if such entity acquires the specific Generating Facility identified in the Interconnection Request and the Point of Interconnection does not change.<sup>440</sup>

### **Section 4 Large Generator Interconnection Study Process Agreement.**<sup>441</sup>

**Within thirty (30) calendar days of the close of the Queue Cluster Window, the CAISO shall provide to each Interconnection Customer with a valid Interconnection Request received during the Queue Cluster Window a pro forma Large Generator Interconnection Study Process Agreement in the form set forth in Appendix 3 of this LGIP. The pro forma Large Generator Interconnection Study Process Agreement shall specify that the Interconnection Customer is responsible for the actual cost of the Interconnection Studies, including reasonable administrative costs, and all requirements of this LGIP. Within three (3) Business Days following the Scoping Meeting, the Interconnection Customer shall specify for inclusion in the attachment to the Large Generator Interconnection Study Process Agreement the Point of Interconnection for the Phase I Interconnection Study. Within ten (10) Business Days following the CAISO's receipt of such designation, the CAISO, in coordination with the applicable Participating TOs, shall provide to the Interconnection Customer a signed Large Generator Interconnection Study Process Agreement. The Interconnection Customer shall execute and deliver to the CAISO the Large Generator Interconnection Study Process Agreement no later than thirty (30) calendar days after the Scoping Meeting.**<sup>442</sup>

### **Section 5 Scoping Meeting.**<sup>443</sup>

**Within five (5) Business Days after the CAISO notifies the Interconnection Customer of a valid Interconnection Request, the CAISO shall establish a date agreeable to the Interconnection Customer and the applicable Participating TO(s) for the Scoping Meeting. All Scoping Meetings shall occur no later than sixty (60) calendar days after the close of the Queue Cluster Window<sup>444</sup>, unless otherwise mutually agreed upon by the Parties. The CAISO shall determine whether the Interconnection Request is at or near the boundary of an affected Participating TO(s) service territory or of any other Affected System(s) so as to potentially affect such third parties. If such a determination is made, the CAISO shall invite the affected Participating TO(s), and/or Affected System Operator(s) in accordance with LGIP Section 3.7, to the Scoping Meeting by informing such third parties of the time and place of the scheduled Scoping Meeting as soon as practicable.<sup>445</sup>**

**Section 4. Queue Position.<sup>446</sup>**

**The purpose of the Scoping Meeting shall be to discuss reasonable Commercial Operation Dates and<sup>447</sup> alternative interconnection options, to exchange information including any transmission data that would reasonably be expected to impact such interconnection options, to analyze such information and to determine the potential feasible Points of Interconnection<sup>448</sup> and eliminate alternatives given resources and available information. The applicable Participating TO(s) and the CAISO will bring to the meeting, as reasonably necessary to accomplish its purpose, the following: (a) such already available technical data, including, but not limited to,<sup>449</sup> (i) general facility loadings, (ii) general instability issues, (iii) general short circuit issues, (iv) general voltage issues, and (v) general reliability issues.<sup>450</sup> and (b) general information regarding the number, location, and capacity of other Interconnection Requests in the Interconnection Study Cycle that may potentially form a Group Study with the Interconnection Customer's Interconnection Request.<sup>451</sup>**

**4.1 General.<sup>452</sup>**

**The Interconnection Customer will bring to the Scoping Meeting, in addition to the technical data in Attachment A to LGIP Appendix 1, any system studies previously performed.<sup>453</sup> The applicable Participating TO(s), the CAISO and the Interconnection Customer will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. On the basis of the meeting, the Interconnection Customer shall designate its Point of Interconnection<sup>454</sup>. The duration of the meeting shall be sufficient to accomplish its purpose.<sup>455</sup>**

The CAISO shall assign a Queue Position based upon the date and time of receipt of the valid Interconnection Request; provided that, if the sole reason an Interconnection Request is not valid is the lack of required information on the application form, and the Interconnection Customer provides such information in accordance with LGIP Section 3.5.3, then the CAISO shall assign the Interconnection Customer a Queue Position based on the date the application form was originally filed. Moving a Point of Interconnection shall result in a lowering of Queue Position if it is deemed a Material Modification under LGIP Section 4.4.3.<sup>456</sup>

**The CAISO shall prepare minutes from the meeting, verified by the Interconnection Customer and the other attendees, that will include, at a minimum, discussions among the applicable Participating TO(s) and the CAISO of<sup>457</sup> the expected results and a good faith estimate of the costs for the Phase I Interconnection Study.<sup>458</sup>**

The queue position of each Interconnection Request will be used to determine the order of performing the Interconnection Studies and determination of cost responsibility for the

facilities necessary to accommodate the Interconnection Request. A higher Queue Position Interconnection Request is one that has been placed "earlier" in the CAISO's queue in relation to another Interconnection Request that is lower queued. The cost of the common upgrades for clustered Interconnection Requests may be allocated without regard to queue position.<sup>459</sup>

## **Section 6 Interconnection Studies.**<sup>460</sup>

### **4.2 Clustering.**<sup>461</sup>

### **6.1 Grouping Interconnection Requests.**<sup>462</sup>

At the CAISO's option, and in coordination with the applicable Participating TO(s), **an**<sup>463</sup> Interconnection Requests may be studied serially or in clusters for the purpose of the Interconnection System Impact Study.<sup>464</sup> Clustering shall be implemented on the basis of Queue Position. If the CAISO elects<sup>465</sup>, in coordination with<sup>466</sup> **Request received during a particular Queue Cluster Window may be studied individually or in a Group Study for the purpose of conducting one or more of the analyses forming the Interconnection Studies. For each Interconnection Study within an Interconnection Study Cycle, the CAISO may develop one or more Group Studies. A Group Study will include, at the CAISO's sole judgment after coordination with the**<sup>467</sup> applicable Participating TO(s), to study Interconnection Requests using Clustering, all Interconnection Requests received within a period not to exceed one hundred and eighty (180) calendar days, hereinafter referred to as the "Queue Cluster Window" shall be studied together.<sup>468</sup> **Interconnection Requests that electrically affect one another with respect to the analysis being performed**<sup>469</sup> without regard to the nature of the underlying Interconnection Service. The deadline for completing all Interconnection System Impact Studies for which<sup>470</sup> **CAISO may also, in its sole judgment after coordination with the applicable Participating TO(s), conduct**<sup>471</sup> an Interconnection System Impact Study Agreement has been executed during a Queue Cluster Window shall be in accordance with LGIP Section 7.4, for all Interconnection Requests assigned to<sup>472</sup> the same Queue Cluster Window.<sup>473</sup> The CAISO may agree to conduct the study of<sup>474</sup> **Study for**<sup>475</sup> an Interconnection Request separately to the extent warranted by Good Utility Practice based upon the electrical remoteness of the proposed Large Generating Facility.<sup>476</sup> **from other Large Generating Facilities with Interconnection Requests in**<sup>477</sup> the same Queue Cluster Window.<sup>478</sup>

Clustering Interconnection System Impact<sup>479</sup> **An Interconnection Request's inclusion in a Group Study will not relieve the CAISO or Participating TO(s) from meeting the timelines for conducting the Phase I Interconnection Study provided in the LGIP. Group**<sup>480</sup> Studies shall be conducted in such a manner to ensure the efficient implementation of the applicable regional transmission expansion plan in light of the transmission system's capabilities at the time of each study.

### **6.2 Scope and Purpose of Phase I Interconnection Study.**<sup>481</sup>

**The Phase I Interconnection Study shall (i) evaluate the impact of all Interconnection Requests received during the Queue Cluster Window on the CAISO Controlled Grid, (ii) preliminarily identify all Network Upgrades needed to address the impacts on the CAISO Controlled Grid of the Interconnection Requests, (iii) preliminarily identify for each Interconnection Request required Interconnection Facilities, (iv) assess the Point of Interconnection selected by each Interconnection Customer and potential alternatives to evaluate potential efficiencies in overall transmission upgrades costs, (v) establish the maximum**

**cost responsibility for Network Upgrades assigned to each Interconnection Request in accordance with LGIP Section 6.3, and (vi) provide a good faith estimate of the cost of Interconnection Facilities for each Interconnection Request.**<sup>482</sup>

**The Phase I Interconnection Study will consist of a short circuit analysis, a stability analysis to the extent the CAISO and applicable Participating TO(s) reasonably expect transient or voltage stability concerns, a power flow analysis, including off-peak analysis, and an On-Peak and Off-Peak Deliverability Assessment(s), as applicable, in accordance with LGIP Section 6.3.2. The Phase I Interconnection Study will state for each Group Study or Interconnection Request studied individually (i) the assumptions upon which it is based, (ii) the results of the analyses, and (iii) the requirements or potential impediments to providing the requested Interconnection Service to all Interconnection Requests in a Group Study or to the Interconnection Request studied individually. The Phase I Interconnection Study will provide, without regard to the requested Commercial Operation Dates of the Interconnection Requests, a list of Network Upgrades to the CAISO Controlled Grid that are preliminarily identified as required as a result of the Interconnection Requests in a Group Study or as a result of any Interconnection Request studied individually and Participating TO's Interconnection Facilities associated with each Interconnection Request, and an estimate of any other financial impacts (i.e., on Local Furnishing Bonds).**<sup>483</sup><sup>484</sup><sup>485</sup><sup>486</sup>

### **6.3 Identification and Cost Allocation Methods for Network Upgrades in Phase I Interconnection Study.**<sup>487</sup><sup>488</sup>

#### **6.3.1 Reliability Network Upgrades.**<sup>489</sup>

**The CAISO, in coordination with the applicable Participating TO(s), will perform short circuit and stability analyses for each Interconnection Request either individually or as part of a Group Study to preliminarily identify the Reliability Network Upgrades needed to interconnect the Large Generating Facilities to the CAISO Controlled Grid. The CAISO, in coordination with the applicable Participating TO(s), shall also perform power flow analyses, under a variety of system conditions, for each Interconnection Request either individually or as part of a Group Study to identify Reliability Criteria violations, including applicable thermal overloads, that must be mitigated by Reliability Network Upgrades.**<sup>490</sup>

**The cost of all Reliability Network Upgrades identified in the Phase I Interconnection Study shall be estimated in accordance with LGIP Section 6.4. The estimated costs of Reliability Network Upgrades identified as a result of an Interconnection Request studied separately shall be assigned solely to that Interconnection Request. The estimated costs of Reliability Network Upgrades identified through a Group Study shall be assigned to all Interconnection Requests in that Group Study pro rata on the basis of the maximum megawatt electrical output of each proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed by the Interconnection Customer in its Interconnection Request.**<sup>491</sup>

#### **6.3.2 Delivery Network Upgrades.**<sup>492</sup>

##### **6.3.2.1 The On-Peak Deliverability Assessment.**<sup>493</sup>

**The CAISO, in coordination with the applicable Participating TO(s), shall perform an On-Peak Deliverability Assessment for Interconnection Customers selecting Full Capacity Deliverability Status in their Interconnection Requests. The On-Peak Deliverability Assessment shall determine the Interconnection Customer's Large Generating Facility's ability to deliver its Energy to the CAISO Controlled Grid under peak load conditions, and identify preliminary Delivery Network Upgrades required to provide the Large Generating Facility with Full Capacity Deliverability Status. The preliminary Delivery Network Upgrades identified by the On-Peak Deliverability Assessment will be used to establish the maximum cost responsibility for Delivery Network Upgrades for each Interconnection Customer selecting Full Capacity Deliverability Status.**<sup>494</sup> Deliverability of a new Large Generating Facility will be assessed on the same basis as all other existing resources interconnected to the CAISO Controlled Grid.<sup>495</sup>

The <sup>496</sup> **On-Peak Deliverability Assessment will identify the Network Upgrades that are required to enable the Large Generating Facility of each Interconnection Customer requesting Full Capacity Deliverability Status to meet the requirements for deliverability. Deliverability requires that the Generating Facility Capacity, as set forth in the Interconnection Request,**<sup>497</sup> can be delivered to the aggregate of <sup>498</sup> **Load on the CAISO Controlled Grid, consistent with Reliability Criteria, under CAISO Controlled Grid peak load and Contingency conditions, and assuming the aggregate output of existing Generating Facilities with established Net Qualifying Capacity values and other Large Generating Facilities in the Interconnection Study Cycle seeking Full Capacity Deliverability Status identified within the On-Peak Deliverability Assessment based on the effect of transmission Constraints.**<sup>499</sup>

**The On-Peak Deliverability Assessment will further perform an analysis to estimate the MW of deliverable generation capacity for the individual or Group Study if the highest cost Delivery Network Upgrade component were removed from the preliminary Delivery Network Upgrade plan, or, at the CAISO's sole discretion, if any other identified Delivery Network Upgrade component(s) were removed from the preliminary Delivery Network Upgrade plan. This information is provided to allow Interconnection Customers to address at the Results Meeting potential modifications under LGIP Section 6.7.2 or change the Interconnection Request's Full Capacity Deliverability Status for purposes of financing under LGIP Section 12.3.1.**<sup>500</sup>

**The methodology for the On-Peak Deliverability Assessment will be published on the CAISO Website or, when effective, included in a CAISO Business Practice Manual. The On-Peak Deliverability Assessment**<sup>501</sup> does not convey any right to deliver electricity to any specific customer<sup>502</sup> **or Delivery Point.**<sup>503</sup>

**The cost of all Delivery Network Upgrades identified in the On-Peak Deliverability Assessment as part of a Phase I Interconnection Study shall be estimated in accordance with LGIP Section 6.4. The estimated costs of Delivery Network Upgrades identified in the On-Peak Deliverability Assessment shall be assigned to all Interconnection Requests selecting Full Capacity Deliverability Status based on the flow impact of each such Large Generating Facility on the Delivery Network Upgrades as determined by the Generation distribution factor methodology set forth in the On-Peak Deliverability Assessment methodology.**<sup>504</sup>

### **6.3.2.2 Off-Peak Deliverability Assessment.**<sup>505</sup>



The CAISO, in coordination with the applicable Participating TO(s), shall perform an Off-Peak Deliverability Assessment for Interconnection Customers selecting Full Capacity Deliverability Status in their Interconnection Requests to determine Delivery Network Upgrades in addition to those identified in the On-Peak Deliverability Assessment, if any, for a Group Study or individual Phase I Interconnection Study that includes one or more Location Constrained Resource Interconnection Generators (LCRIG), where the fuel source or source of energy for the LCRIG substantially occurs during off-peak conditions. Delivery Network Upgrades will be identified under this Section to ensure that the full maximum megawatt electrical output of each proposed new LCRIG or the amount of megawatt increase in the generating capacity of each existing LCRIG as listed by the Interconnection Customer in its Interconnection Request, whether studied individually or as a Group Study, is deliverable to the aggregate of Load on the CAISO Controlled Grid under the Generation dispatch conditions studied. The methodology for the Off-Peak Deliverability Assessment will be published on the CAISO Website or, if applicable, included in a CAISO Business Practice Manual.<sup>506</sup>

At the CAISO's discretion, an additional Off-Peak Deliverability Assessment may be performed to estimate the MW of deliverable generation capacity from the LCRIG studied individually or from the Group Study if the highest cost, or any other, Delivery Network Upgrade component were removed from the preliminary Delivery Network Upgrade plan. This information is provided to allow Interconnection Customers to address at the Results Meeting potential modifications under LGIP Section 6.7.2 or change the Interconnection Request's Full Capacity Deliverability Status for purposes of financing under LGIP Section 12.3.1.<sup>507</sup>

The cost of all Delivery Network Upgrades identified in the Off-Peak Deliverability Assessment as part of Phase I Interconnection Study shall be estimated in accordance with LGIP Section 6.4. The estimated costs of Delivery Network Upgrades identified in the Off-Peak Deliverability Assessment shall be assigned to each Interconnection Request included in the Group Study or studied individually based on the flow impact of each such LCRIG on the Delivery Network Upgrades as determined by the Generation distribution factor methodology set forth in the Off-Peak Deliverability Assessment methodology.<sup>508</sup>

#### 6.4 Use of Per Unit Costs to Estimate Network Upgrade Costs.<sup>509</sup>

Prior to the commencement of the initial Queue Cluster Window for each calendar year, each Participating TO, under the direction of the CAISO, shall publish per unit costs for facilities generally required to interconnect Generation to their respective systems. These per unit costs shall reflect the anticipated cost of procuring and installing such facilities during the current Interconnection Study Cycle, and may vary among Participating TOs and within a Participating TO Service Territory based on geographic and other cost input differences, and should include an annual adjustment for the following ten (10) years to account for the anticipated timing of procurement to accommodate a potential range of Commercial Operation Dates of Interconnection Requests in the Interconnection Study Cycle. The per unit costs will be used to develop the cost of Reliability Network Upgrades, Delivery Network Upgrades and Participating TO's Interconnection Facilities under this LGIP Section 6.<sup>510</sup>

Prior to adoption and publication of final per unit costs for use in the Interconnection Study Cycle, the CAISO shall publish to the CAISO Website draft per unit costs, including non-confidential information regarding the bases

therefore, hold a stakeholder meeting to address the draft per unit costs, and permit stakeholders to provide comments on the draft per unit costs.<sup>511</sup>

#### 6.5 Phase I Interconnection Study Costs Form the Basis of Interconnection Financial Security.<sup>512</sup>

The costs assigned to Interconnection Customers for Network Upgrades under this Section 6 of the LGIP shall establish the maximum value for the Interconnection Financial Security required from each Interconnection Customer under LGIP Section 9 for such Network Upgrades. In contrast, the costs assigned to Interconnection Customers for Participating TO's Interconnection Facilities under this Section 6 of the LGIP are estimates only that establish the basis for the initial Interconnection Financial Security required from each Interconnection Customer under LGIP Section 9.2.<sup>513</sup>

#### 6.6 Phase I Interconnection Study Procedures.<sup>514</sup>

The CAISO shall coordinate the Phase I Interconnection Study with applicable Participating TO(s) pursuant to LGIP Section 3.2 and any Affected System that is affected by the Interconnection Request pursuant to LGIP Section 3.7. Existing studies shall be used to the extent practicable when conducting the Phase I Interconnection Study. The CAISO will coordinate Base Case development with the applicable Participating TOs to ensure the Base Cases are accurately developed. The CAISO shall use Reasonable Efforts to complete and publish to Interconnection Customers the Phase I Interconnection Study report at a maximum within two hundred seventy (270) calendar days after the close of the Queue Cluster Window and approximately one hundred eighty calendar days after the final Scoping Meeting held for the Interconnection Study Cycle; however, each individual study or Group Studies may be completed prior to this maximum time where practicable based on factors, including, but not limited to, the number of Interconnection Requests in the Queue Cluster Window, study complexity, and reasonable availability of subcontractors as provided under LGIP Section 13.2. The CAISO will share applicable study results with the applicable Participating TO(s) for review and comment and will incorporate comments into the study report. The CAISO will issue a final Phase I Interconnection Study report to the Interconnection Customer. At the time of completion of the Phase I Interconnection Study, the CAISO may, at the Interconnection Customer's request, determine whether the provisions of LGIP Section 7.6 apply.<sup>515</sup>

At any time the CAISO determines that it will not meet the required time frame for completing the Phase I Interconnection Study due to the large number of Interconnection Requests in the Queue Cluster Window, study complexity, or unavailability of subcontractors on a reasonable basis to perform the study in the required time frame, the CAISO shall notify the Interconnection Customers as to the schedule status of the Phase I Interconnection Study and provide an estimated completion date with an explanation of the reasons why additional time is required.<sup>516</sup>

Upon request, the CAISO shall provide the Interconnection Customer all supporting documentation, workpapers and relevant pre-Interconnection Request and post-Interconnection Request power flow, short circuit and stability databases for the Phase I Interconnection Study, subject to confidentiality arrangements consistent with LGIP Section 13.1.<sup>517</sup>

## **6.7 Phase I Interconnection Study Results Meeting.**<sup>518</sup>

The Queue Cluster Window shall have a fixed time interval based on fixed annual opening and closing dates. Any changes to the established Queue Cluster Window interval and opening or closing dates shall be announced with a posting on the CAISO Website beginning at least one hundred and eighty (180) calendar days in advance of the change and continuing thereafter through the end date of the first Queue Cluster Window that is to be modified.<sup>519</sup>

**Within thirty (30) calendar days of providing the Phase I Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s), the CAISO and the Interconnection Customer shall hold a Results Meeting to discuss the results of the Phase I Interconnection Study, including assigned cost responsibility.**<sup>520</sup>

## **4.3 Transferability of Queue Position**<sup>521 522</sup>

### **6.7.1 Commercial Operation Date.**<sup>523</sup>

An Interconnection Customer may transfer its<sup>524</sup> Queue Position<sup>525</sup> to another entity only if such entity acquires the specific Generating Facility identified in the Interconnection Request and the Point of Interconnection does not change.<sup>526</sup>

**At the Results Meeting, the Interconnection Customer shall provide a schedule outlining key milestones including environmental survey start date, expected environmental permitting submittal date, expected procurement date of project equipment, back-feed date for project construction, and expected project construction date. This will assist the parties in determining if Commercial Operation Dates are reasonable. If major Interconnection Customer's Interconnection Facilities for the Large Generating Facility have been identified in the Phase I Interconnection Study, such as telecommunications equipment to support a possible Special Protection System (SPS), distribution feeders to support back feed, new substation, and/or expanded substation work, permitting and material procurement lead times may result in the need to alter the proposed Commercial Operation Date. The Parties may agree to a new Commercial Operation Date. In addition, where an Interconnection Customer intends to establish Commercial Operation separately for different Electric Generating Units or project phases at its Generating Facility, it may only do so in accordance with an implementation plan agreed to in advance by the CAISO and Participating TO, which agreement shall not be unreasonably withheld. Where the parties cannot agree, the Commercial Operation Date determined reasonable by the CAISO, in coordination with the applicable Participating TO(s), will be used for the Phase II Interconnection Study where the changed Commercial Operation Date is needed to accommodate the anticipated completion, assuming Reasonable Efforts by the applicable Participating TO(s), of necessary Reliability Network Upgrades and/or Participating TO's Interconnection Facilities, pending the outcome of any relief sought by the Interconnection Customer under LGIP Section 13.5. The Interconnection Customer must notify the CAISO within five (5) Business Days following the Results Meeting that it is initiating dispute procedures under LGIP Section 13.5.**<sup>527</sup>

## **4.4**<sup>528</sup> **6.7.2**<sup>529</sup> **Modifications.**

The<sup>530</sup> **At the Results Meeting, the Interconnection Customer should be prepared to discuss any desired modifications to the Interconnection Request. Within five (5) Business Days following the Results Meeting, the**<sup>531</sup> Interconnection Customer shall submit to the CAISO, in writing, modifications to any information provided in the

Interconnection Request. The CAISO will forward the Interconnection Customer's modification to the applicable Participating TO(s) within one (1) Business Day of receipt. The Interconnection Customer shall ~~retain its Queue Position~~<sup>532</sup> **remain eligible for the Phase II Interconnection Study**<sup>533</sup> if the modifications are in accordance with LGIP Sections 4.4.1, 4.4.2 or 4.4.5, ~~or are determined not to be Material Modifications pursuant to LGIP Section 4.4.3.~~<sup>534</sup> **6.7.2.1 or 6.7.2.2**<sup>535</sup>

Notwithstanding the above, during the course of the Interconnection Studies, the Interconnection Customer, the applicable Participating TO(s), or the CAISO may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes are acceptable to the applicable Participating TO(s), the CAISO, and Interconnection Customer, such acceptance not to be unreasonably withheld, the CAISO shall modify the Point of Interconnection and/or configuration in accordance with such changes ~~and proceed with any re-studies necessary to do so in accordance with LGIP Section 6.4, LGIP Section 7.6 and LGIP Section 8.5 as applicable and the Interconnection Customer shall retain its Queue Position~~<sup>536</sup> **without altering the Interconnection Request's eligibility for participating in Interconnection Studies**<sup>537</sup>.

~~4.4.1~~ Prior to the return of the executed Interconnection System Impact Study Agreement to the CAISO, ~~modifications~~<sup>538</sup> **6.7.2.1 Modifications**<sup>539</sup> permitted under this Section **6.7.2**<sup>540</sup> shall include specifically: (a) a decrease of up to 60 percent of ~~in the~~<sup>541</sup> ~~electrical output (MW) of the proposed project;~~ <sup>542</sup> (b) modifying the technical parameters associated with the Large Generating Facility technology or the Large Generating Facility step-up transformer impedance characteristics; and (c) modifying the interconnection configuration. ~~For plant increases, the incremental increase in plant output will go to the end of the queue for the purposes of cost allocation and study analysis.~~<sup>543</sup>

~~4.4.2~~ Prior to the return of the executed Interconnection Facility Study Agreement to the CAISO, the ~~modifications permitted under this Section shall include specifically: (a) additional 15 percent decrease of electrical output (MW), and (b) Large Generating Facility technical parameters associated with modifications to Large Generating Facility technology and transformer impedances; provided, however, the incremental costs associated with those modifications are the responsibility of the requesting Interconnection Customer.~~<sup>544</sup>

~~4.4.3~~ Prior to making<sup>545</sup> **6.7.2.2 For**<sup>546</sup> any modification other than those specifically permitted by LGIP Sections 4.4.1, 4.4.2, and 4.4.5,<sup>547</sup> **Section 6.7.2.1**<sup>548</sup> the Interconnection Customer may first request that the CAISO evaluate whether such modification is a Material Modification. In response to the Interconnection Customer's request, the CAISO, in coordination with the affected Participating TO **(s) and, if applicable, any Affected System Operator**<sup>549</sup>, shall evaluate the proposed modifications prior to making them and the CAISO shall inform the Interconnection Customer in writing of whether the modifications would constitute a Material Modification. Any change to the Point of Interconnection, ~~except those deemed acceptable under LGIP Sections 4.4.1, 6.1, 7.2 or so allowed elsewhere,~~<sup>550</sup> **for that specified by the CAISO in an Interconnection Study or otherwise allowed under this LGIP Section 6.7.2,**<sup>551</sup> shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

~~4.4.4~~ Upon receipt of the Interconnection Customer's request for modification permitted under this LGIP Section 4.4, the CAISO shall ~~commence and conduct or have conducted any~~

necessary additional studies as soon as practicable, but in no event shall such studies commence later than thirty (30) calendar days after receiving notice of the Interconnection Customer's request. Any additional studies resulting from such modification shall be done at the Interconnection Customer's cost.<sup>552</sup>

~~4.4.5~~ Extensions of less than three (3) cumulative years in the Commercial Operation Date of the Large Generating Facility to which the Interconnection Request relates are not material and should be handled through construction sequencing.<sup>553</sup>

## ~~Section 5. Procedures for Interconnection Requests Submitted Prior to Effective Date of Standard Large Generator Interconnection Procedures.~~<sup>554</sup>

### ~~5.1 Queue Position for Pending Requests.~~<sup>555</sup>

~~5.1.1~~ Any Interconnection Customer assigned a queue position prior to the effective date of this LGIP shall retain that relative queue position.<sup>556</sup>

~~5.1.1.1~~ If an Interconnection Study agreement has not been executed as of the effective date of this LGIP, then such Interconnection Study, and any subsequent Interconnection Studies, shall be processed in accordance with this LGIP.<sup>557</sup>

~~5.1.1.2~~ If an Interconnection Study agreement has been executed prior to the effective date of this LGIP, such Interconnection Study shall be completed in accordance with the terms of such agreement. With respect to any remaining studies for which an Interconnection Customer has not signed an Interconnection Study agreement prior to the effective date of the LGIP, the Participating TO must offer the Interconnection Customer the option of either continuing under the Participating TO's existing interconnection study process pursuant to CAISO Tariff Appendix W or going forward with the completion of the necessary Interconnection Studies (for which it does not have a signed Interconnection Studies agreement) in accordance with this LGIP.<sup>558</sup>

~~5.1.1.3~~ If an agreement to interconnect a Generating Unit has been submitted to FERC for approval before the effective date of the LGIP, then the agreement would be grandfathered.<sup>559</sup>

### ~~5.1.2 Transition Period.~~<sup>560</sup>

To the extent necessary, the Participating TO and/or the CAISO and Interconnection Customers with an outstanding request (i.e., an interconnection request or application for which an agreement to interconnect a Generating Unit has not been submitted to FERC for approval as of the effective date of this LGIP) shall transition to this LGIP within a reasonable period of time not to exceed sixty (60) calendar days. The use of the term "outstanding request" herein shall mean any interconnection request or application, on the effective date of this LGIP: (i) that has been submitted but not yet accepted by the CAISO or the Participating TO; (ii) where the related interconnection agreement has not yet been submitted to FERC for approval in executed or unexecuted form, (iii) where the relevant interconnection study agreements have not yet been executed, or (iv) where any of the relevant interconnection studies are in process but not yet completed. Any Interconnection Customer with an outstanding request as of the effective date of this LGIP may request a reasonable extension of any deadline, otherwise applicable, if necessary to avoid undue hardship or prejudice to its Interconnection Request. A reasonable extension shall be granted by the CAISO, as applicable, to the extent consistent with the intent and process provided for under this LGIP.<sup>561</sup>

## **5.2<sup>562</sup> — Change in CAISO Operational Control.<sup>563</sup>**

If the CAISO no longer has control of the portion of the CAISO Controlled Grid at the Point of Interconnection during the period when an Interconnection Request is pending, the CAISO shall transfer to<sup>564</sup> applicable Participating TO<sup>565</sup> which has ownership of the Point of Interconnection any amount of the deposit or payment with interest thereon that exceeds the cost that it incurred to evaluate the request for interconnection. Any difference between such net deposit amount and the costs that the<sup>566</sup> successor Participating TO<sup>567</sup> incurs to evaluate the request for interconnection shall be paid by or refunded to the Interconnection Customer, as appropriate. The CAISO shall coordinate with the applicable<sup>568</sup> Participating TO<sup>569</sup> which has ownership of the Point of Interconnection to complete any Interconnection Study, as appropriate, that the CAISO has begun but has not completed. If the CAISO has tendered a draft LGIA to the Interconnection Customer but the Interconnection Customer has neither executed the LGIA<sup>570</sup> or<sup>571</sup> requested the filing of an unexecuted LGIA with FERC, unless otherwise provided, the Interconnection Customer must complete negotiations with the applicable<sup>572</sup> Participating TO<sup>573</sup> which has the ownership of the Point of Interconnection.<sup>574</sup>

## **Section 6. — Interconnection Feasibility Study.<sup>575</sup>**

### **6.1 — Interconnection Feasibility Study Agreement.<sup>576</sup>**

Simultaneously with the acknowledgement of a valid Interconnection Request, the CAISO shall provide to the Interconnection Customer a pro forma Interconnection Feasibility Study Agreement. The pro forma Interconnection Feasibility Study Agreement shall specify that the Interconnection Customer is responsible for the actual cost of the Interconnection Feasibility Study. Within five (5) Business Days following the Scoping Meeting, the Interconnection Customer shall specify for inclusion in the attachment to the Interconnection Feasibility Study Agreement the Point of Interconnection and one alternative Point of Interconnection. Within fifteen (15) Business Days following the CAISO's receipt of such designation, the CAISO, in coordination with the Participating TO shall provide to the Interconnection Customer a signed Interconnection Feasibility Study Agreement, which shall include a good faith estimate of the cost for completing the Interconnection Feasibility Study. The Interconnection Customer shall execute and deliver to the CAISO the Interconnection Feasibility Study Agreement along with an additional \$10,000 deposit no later than thirty (30) calendar days after its receipt.<sup>577</sup>

On or before the return of the executed Interconnection Feasibility Study Agreement to the CAISO, the Interconnection Customer shall provide to the CAISO valid<sup>578</sup> technical data called for in LGIP Appendix 1, Attachment A.<sup>579</sup>

If the Interconnection Feasibility Study uncovers any unexpected result(s) not contemplated during the Scoping Meeting, a substitute Point of Interconnection identified by the Interconnection Customer, the applicable Participating TO(s) and CAISO, and acceptable to the others, such acceptance not to be unreasonably withheld, will be substituted for the designated Point of Interconnection specified above without loss of Queue Position, and re-studies shall be completed pursuant to LGIP Section 6.4 as applicable. For the purpose of this LGIP Section 6.1, if the CAISO, applicable Participating TO(s) and Interconnection Customer cannot agree on the substituted Point of Interconnection, then the Interconnection Customer may direct that the alternative as specified in the Interconnection Feasibility Study Agreement, as specified pursuant to LGIP Section 3.5.4, shall be the substitute.<sup>580</sup>

If the Interconnection Customer, the applicable Participating TO, and the CAISO agree to forgo the Interconnection Feasibility Study, the CAISO will tender an Interconnection System Impact Study Agreement within fifteen (15) Business Days from receipt of the Interconnection Customer's designated Point of Interconnection and alternative, pursuant to the procedures specified in Section 7 of this LGIP, and apply the deposits made in accordance with LGIP Section 3.5.1, in addition to the deposit made in accordance with LGIP Section 7, towards the Interconnection System Impact Study.<sup>581</sup>

## **6.2 — Scope of Interconnection Feasibility Study.**<sup>582</sup>

The Interconnection Feasibility Study shall preliminarily evaluate the feasibility of the proposed interconnection to the CAISO Controlled Grid.<sup>583</sup>

The Interconnection Feasibility Study will consider Base Cases as well as all generating facilities (and with respect to (iv), any identified Network Upgrades) that, on the date the Interconnection Feasibility Study is commenced: (i) are directly interconnected to the CAISO Controlled Grid; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending request to interconnect to an Affected System; (iv) have a pending higher queued Interconnection Request to interconnect to the CAISO Controlled Grid; and (v) have no Queue Position but have executed an LGIA or requested that an unexecuted LGIA be filed with FERC. The Interconnection Feasibility Study will consist of a power flow and short circuit analysis. The Interconnection Feasibility Study will provide a list of facilities on the applicable Participating TOs' portion of the CAISO Controlled Grid and a non-binding good faith estimate of cost and cost responsibility and a non-binding good faith estimated time to construct. In addition, the Interconnection Feasibility Study will describe what results are expected in the Interconnection System Impact Study and<sup>584</sup> any other financial impacts (i.e., on Local Furnishing Bonds).<sup>585</sup>

## **6.3 — Interconnection Feasibility Study Procedures.**<sup>586</sup><sup>587</sup>

Existing studies shall be used to the extent practicable when conducting the Interconnection Feasibility Study. The CAISO shall use Reasonable Efforts to complete a draft Interconnection Feasibility Study no later than forty five (45) calendar days after the CAISO receives the fully executed Interconnection Feasibility Study Agreement. The CAISO shall share applicable study results for review and comment, provide the study results to any other potentially impacted Participating TO(s), and incorporate comments and issue a final Interconnection Feasibility Study to the Interconnection Customer within sixty (60) calendar days following receipt of the fully executed Interconnection Feasibility Study Agreement. At the request of the Interconnection Customer or at any time the CAISO determines that the study cannot be completed within the required time frame for completing the Interconnection Feasibility Study, the CAISO shall notify the Interconnection Customer as to the schedule status of the Interconnection Feasibility Study. If the Interconnection Feasibility Study cannot be completed within that time period, the CAISO shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required.<sup>588</sup>

Upon request, the CAISO shall provide the Interconnection Customer supporting documentation, workpapers and relevant power flow and short circuit databases for the Interconnection Feasibility Study, subject to confidentiality arrangements consistent with LGIP Sections 2.3 and 13.1.<sup>589</sup>

### **6.3.1 — Meeting with the Participating TO(s) and CAISO.**<sup>590</sup>

~~Within ten (10) Business Days of providing an Interconnection Feasibility Study report to the Interconnection Customer, the CAISO, the applicable Participating TO(s), and the Interconnection Customer shall meet to discuss the results of the Interconnection Feasibility Study.~~<sup>591</sup>

#### ~~6.4 — Re-Study.~~<sup>592</sup>

~~If re-study of the Interconnection Feasibility Study is required due to a higher queued project dropping out of the queue, or a modification of a higher queued project subject to LGIP Section 4.4, or re-designation of the Point of Interconnection pursuant to LGIP Section 6.1, or any other effective change in information which necessitates a re-study, the CAISO shall notify the Interconnection Customer and the applicable Participating TO(s) in writing along with providing a description of the expected results of the re-study. Upon receipt of such notice, the Interconnection Customer shall provide the CAISO within ten (10) Business Days either a written request that the CAISO (i) terminate the study and withdraw the Interconnection Request; or (ii) continue the study. If the Interconnection Customer requests the CAISO to continue the study, the Interconnection Customer shall pay the CAISO an additional \$10,000 deposit for the re-study along with providing written notice for the CAISO to continue.~~<sup>593</sup>

~~Such re-study shall take not longer than forty five (45) calendar days from the date the CAISO receives the Interconnection Customer's written notice to continue the study and payment of the additional \$10,000 deposit. The CAISO shall share applicable study results for review, provide the study results for review and comment to any other potentially impacted Participating TO(s), incorporate comments, and issue a final study to the Interconnection Customer within sixty (60) calendar days from the date the CAISO receives the Interconnection Customer's written notice to continue the study and payment of the additional \$10,000 deposit. If the Interconnection Feasibility Study cannot be completed within that time period, the CAISO shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required. Any and all costs of the re-study shall be borne by the Interconnection Customer being re-studied.~~<sup>594</sup>

### ~~Section 7. — Interconnection System Impact Study.~~<sup>595</sup>

#### ~~7.1 — Interconnection System Impact Study Agreement.~~<sup>596</sup>

~~Simultaneously with the delivery of the Interconnection Feasibility Study to the Interconnection Customer, the CAISO shall provide to the Interconnection Customer an Interconnection System Impact Study Agreement. The Interconnection System Impact Study Agreement shall provide that the Interconnection Customer shall compensate the CAISO for the actual cost of the Interconnection System Impact Study. Within three (3) Business Days following the Interconnection Feasibility Study results meeting, CAISO in coordination with the applicable Participating TO(s) shall provide to the Interconnection Customer a signed Interconnection System Impact Study Agreement which shall include a non-binding good faith estimate of the cost and timeframe for completing the Interconnection System Impact Study.~~<sup>597</sup>

#### ~~7.2 — Execution of Interconnection System Impact Study Agreement.~~<sup>598</sup>

~~The Interconnection Customer shall execute the Interconnection System Impact Study Agreement and deliver the executed Interconnection System Impact Study Agreement to the CAISO no later than thirty (30) calendar days after its receipt along with a \$50,000 deposit.~~<sup>599</sup>



If the Interconnection Customer does not provide all such valid technical data, such as Attachment A to LGIP Appendix 1, when it delivers the Interconnection System Impact Study Agreement, the CAISO shall notify the Interconnection Customer of the deficiency within five (5) Business Days of the receipt of the executed Interconnection System Impact Study Agreement and the Interconnection Customer shall cure the deficiency within ten (10) Business Days of receipt of the notice, provided, however, such deficiency does not include failure to deliver the executed Interconnection System Impact Study Agreement or deposit.<sup>600</sup>

If the Interconnection System Impact Study uncovers any unexpected result(s) not contemplated during the Scoping Meeting and the Interconnection Feasibility Study, a substitute Point of Interconnection identified by either the Interconnection Customer, the CAISO, or the applicable Participating TO(s), and acceptable to the others, such acceptance not to be unreasonably withheld, will be substituted for the designated Point of Interconnection specified above without loss of Queue Position, and re-studies shall be completed pursuant to LGIP Section 7.6 as applicable. If the CAISO, applicable Participating TO(s) and the Interconnection Customer cannot agree that the results were unexpected, then the CAISO will make a determination that the results were either expected or unexpected. For the purpose of this LGIP Section 7.2, if the applicable Participating TO(s), CAISO and Interconnection Customer cannot agree on the substituted Point of Interconnection, then the Interconnection Customer may direct that the alternative as specified in the Interconnection Feasibility Study Agreement, as specified pursuant to LGIP Section 3.5.4, shall be the substitute.<sup>601</sup>

### **7.3 — Scope of Interconnection System Impact Study.**<sup>602</sup>

The Interconnection System Impact Study shall evaluate the impact of the proposed interconnection on the reliability of the CAISO Controlled Grid. The Interconnection System Impact Study will consider Base Cases as well as all generating facilities (and with respect to (iv) below, any identified Network Upgrades associated with such higher queued Interconnection Request) that, on the date the Interconnection System Impact Study is commenced: (i) are directly interconnected to the CAISO Controlled Grid; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending request to interconnect to an Affected System; (iv) have a pending higher queued Interconnection Request to interconnect to the CAISO Controlled Grid; and (v) have no Queue Position but have executed an LGIA or requested that an unexecuted LGIA be filed with FERC.<sup>603</sup>

The Interconnection System Impact Study will consist of a short circuit analysis, a stability analysis, a power flow analysis and a Deliverability Assessment as described in LGIP Sections 3.3.2 and 3.3.3. The Interconnection System Impact Study will state the assumptions upon which it is based; state the results of the analyses; and provide<sup>604</sup> the requirements or potential impediments to providing the requested Interconnection Service<sup>605</sup>, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. The Interconnection System Impact Study will provide a list of facilities on the CAISO Controlled Grid that are required as a result of the Interconnection Request and a non-binding good faith estimate of cost and cost responsibility and a non-binding good faith estimated time to construct and estimate of any other financial impacts (i.e., on Local Furnishing Bonds.<sup>606</sup>

### **7.4 — Interconnection System Impact Study Procedures.**<sup>607</sup>

~~The CAISO shall coordinate the Interconnection System Impact Study with applicable Participating TO(s) and any Affected System that is affected by the Interconnection Request pursuant to LGIP Section 3.7 above. Existing studies shall be used to the extent practicable when conducting the Interconnection System Impact Study. The CAISO<sup>608</sup> will coordinate Base Case development<sup>609</sup> with the<sup>610</sup> applicable<sup>611</sup> Participating<sup>612</sup> TOs to ensure the Base Cases are accurately developed. The CAISO<sup>613</sup> shall use Reasonable Efforts to complete a draft Interconnection System Impact Study within ninety (90) calendar days after the receipt of the executed Interconnection System Impact Study Agreement, study payment, and valid technical data<sup>614</sup>. The CAISO will share applicable study results with the applicable Participating TO(s), for review and comment, and will incorporate comments into the study report. The CAISO will issue a final<sup>615</sup> Interconnection System Impact Study report to the Interconnection Customer within one hundred twenty (120) calendar days after the receipt of the executed Interconnection System Impact Study Agreement, study payment, and valid technical data. If the CAISO uses Clustering, the CAISO shall use Reasonable Efforts to deliver a completed Interconnection System Impact Study within one hundred twenty (120) calendar days after the close of the Queue Cluster Window.<sup>616</sup>~~

~~At the request of the Interconnection Customer or at any time the CAISO determines that it will not meet the required time frame for completing the Interconnection System Impact Study, the CAISO shall notify the Interconnection Customer as to the schedule status of the Interconnection System Impact Study. If the Interconnection System Impact Study cannot be completed within the time period, the CAISO shall notify the Interconnection Customer and provide an estimated completion date<sup>617</sup> with<sup>618</sup> an explanation of the reasons why additional time is required.<sup>619</sup>~~

~~Upon request, the CAISO shall provide the Interconnection Customer<sup>620</sup> all<sup>621</sup> supporting documentation, workpapers<sup>622</sup> and relevant pre-Interconnection Request and post-Interconnection Request power flow, short circuit and stability databases for the<sup>623</sup> Interconnection System Impact Study, subject to confidentiality arrangements consistent with LGIP Section 13.1.<sup>624</sup>~~

#### **~~7.5 Meeting with the CAISO and Participating TO(s).~~<sup>625</sup>**

~~Within ten (10) Business Days of providing an Interconnection System Impact Study report to the Interconnection Customer, the applicable Participating TO(s), the CAISO and the Interconnection Customer shall meet to discuss the results of the Interconnection System Impact Study.<sup>626</sup>~~

#### **~~7.6 Re-Study.~~<sup>627</sup>**

~~If re-study of the Interconnection System Impact Study is required due to a higher queued project dropping out of the queue, a modification of a higher queued project subject to LGIP Section 4.4, or re-designation of the Point of Interconnection pursuant to LGIP Section 7.2, or any other effective change in information which necessitates a re-study, the CAISO shall notify the Interconnection Customer in writing along with providing a description of the expected results of the re-study. Upon receipt of such notice, the Interconnection Customer shall provide the CAISO within ten (10) Business Days either a written request that the CAISO (i) terminate the study and withdraw the Interconnection Request; or (ii) continue the study. If the Interconnection Customer requests the CAISO to continue the study, the Interconnection Customer shall pay the CAISO an additional \$10,000 deposit for the re-study along with providing written notice for the CAISO to continue.<sup>628</sup>~~

Such re-study shall take no longer than sixty (60) calendar days from the date the CAISO receives the Interconnection Customer's written notice to continue the study and payment of the additional \$10,000 deposit. The CAISO will share applicable study results with the applicable Participating TO(s) for review and comment, and will incorporate comments into the study report. The CAISO will issue a final study report to the Interconnection Customer within eighty (80) calendar days following receipt of the Interconnection Customer's written notice to continue the study and payment of the additional \$10,000 deposit. If the Interconnection System Impact Study cannot be completed within that time period, the CAISO shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required. Any and all costs of re-study shall be borne by the Interconnection Customer being re-studied.<sup>629</sup>

## **Section 8. Interconnection Facilities Study.**<sup>630</sup>

### **8.1 Interconnection Facilities Study Agreement.**<sup>631</sup>

Simultaneously with the delivery of the Interconnection System Impact Study report to the Interconnection Customer, the CAISO shall provide to the Interconnection Customer a pro-forma Interconnection Facilities Study Agreement. The pro-forma Interconnection Facilities Study Agreement shall provide that the Interconnection Customer shall compensate the CAISO for the actual cost of the Interconnection Facilities Study. Within ten (10) Business Days following the Interconnection System Impact Study results meeting, the CAISO shall provide to the Interconnection Customer a signed Interconnection Facilities Study Agreement which shall include a non-binding good faith estimate of the cost and timeframe for completing the Interconnection Facilities Study.<sup>632</sup>

The Interconnection Customer shall execute the Interconnection Facilities Study Agreement and deliver the executed Interconnection Facilities Study Agreement to the CAISO within thirty (30) calendar days after its receipt, together with the required technical data and the greater of \$100,000 or the Interconnection Customer's portion of the estimated monthly cost of conducting the Interconnection Facilities Study.<sup>633</sup>

## **Section 7 Phase II Interconnection Study.**<sup>634</sup>

**8.1.1** For studies where the estimated cost exceeds \$100,000, the CAISO may invoice the Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection Facilities Study for the remaining balance of the estimated Interconnection Facilities Study cost. The Interconnection Customer shall pay invoiced amounts within thirty (30) calendar days of receipt of invoice. The CAISO shall continue to hold the amounts on deposit until settlement of the final invoice.<sup>635</sup>

### **7.1 Scope of Phase II Interconnection Study.**<sup>636</sup>

### **8.2 Scope of Interconnection Facilities Study.**<sup>637</sup>

**The CAISO, in coordination with the applicable Participating TO(s), will conduct a Phase II Interconnection Study that will incorporate eligible Interconnection Requests from the previous two Phase I Interconnection Studies. The Phase II Interconnection Study shall (i) update, as necessary, analyses performed in the Phase I Interconnection Studies to account for the withdrawal of Interconnection Requests, (ii) identify final Reliability Network Upgrades needed to physically interconnect the Large Generating Facilities, (iii) assign responsibility for financing the identified final Reliability Network Upgrades, (iv) identify, following coordination with the CAISO's Transmission Planning Process, final Delivery**

**Network Upgrades needed to interconnect those Large Generating Facilities selecting Full Capacity Deliverability Status, (v) assign responsibility for financing Delivery Network Upgrades needed to interconnect those Large Generating Facilities selecting Full Capacity Deliverability Status, (vi) identify for each Interconnection Request final Point of Interconnection and Participating TO's Interconnection Facilities and Interconnection Customer's Interconnection Facilities, (vii) provide a +/-20% estimate for each Interconnection Request of the final Participating TO's Interconnection Facilities and Interconnection Customer's Interconnection Facilities, and (viii) optimize in-service timing requirements based on operational studies in order to maximize achievement of the Commercial Operation Dates of the Large Generating Facilities.**<sup>638</sup>

The<sup>639</sup> **With respect to the foregoing items, the Phase II**<sup>640</sup> Interconnection-Facilities<sup>641</sup> Study shall specify and estimate the cost of the equipment, engineering, procurement and construction work, including the financial impacts (i.e., on Local Furnishing Bonds), if any, and schedule for effecting remedial measures that address such financial impacts, needed on the CAISO Controlled Grid to implement the conclusions of the **updated Phase II**<sup>642</sup> Interconnection-System Impact<sup>643</sup> Study **technical analyses**<sup>644</sup> in accordance with Good Utility Practice to physically and electrically connect the Interconnection Customer's Interconnection Facilities to the CAISO Controlled Grid. The **Phase II**<sup>645</sup> Interconnection-Facilities<sup>646</sup> Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Participating TO's Interconnection Facilities and Network Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities.

## **7.2 Coordination of the Phase II Interconnection Study with the Transmission Planning Process.**<sup>647</sup>

**The CAISO shall coordinate the Phase II Interconnection Studies with the CAISO's Transmission Planning Process under CAISO Tariff Section 24. This coordination shall include, but not be limited to:**<sup>648</sup>

- (i) consistency, to the maximum extent applicable under Good Utility Practice, between the Interconnection Base Case Data used for performance of the Phase II Interconnection Studies and the Unified Planning Assumptions developed for the Transmission Planning Process, including, but not limited to, data relating to Demand data, network topology, and generation resources;**<sup>649</sup>
- (ii) consideration of any conceptual transmission plan(s) developed, but not rejected, in the current or former Transmission Planning Processes intended to access generation development areas as a means to satisfy the Network Upgrade requirements to interconnect Generating Facilities included in the Phase II Interconnection Study;**<sup>650</sup>
- (iii) performance of sensitivities within the Transmission Planning Process, including cases considering Generating Facilities included in the Phase II Interconnection Study(ies) to the extent possible, to optimize transmission upgrades developed in the current Transmission Planning Process to achieve System Reliability, economic efficiency, and satisfy the Network Upgrade requirements to interconnect Generating Facilities included in the Phase II Interconnection Study;**<sup>651</sup>

(iv) consideration of future generation development potential in transmission upgrade designs pursuant to criteria developed as part of the Unified Planning Assumptions; and<sup>652</sup>

(v) consideration of phased development and option value of transmission projects to address uncertainty.<sup>653</sup>

Network Upgrades, apart from detail engineering and final cost determinations, identified in any Phase II Interconnection Study or as part of the Transmission Planning Process that must receive CAISO Governing Board approval under Section 24 of the CAISO Tariff may be subject to Section 24.2.5.2 of the CAISO Tariff.<sup>654</sup>

Generation projects entering the Phase II Interconnection Study will also be considered in the Unified Planning Assumptions, as appropriate. Transmission projects proposed through the Phase II Interconnection Study that require CAISO Governing Board approval will be integrated into the stakeholder process under the Transmission Planning Process.<sup>655</sup>

### 7.3 Financing of Reliability Network Upgrades.<sup>656</sup>

The responsibility to finance final Reliability Network Upgrades identified in the Phase II Interconnection Study of an Interconnection Request studied separately shall be assigned solely to that Interconnection Request up to the cost assignment for Reliability Network Upgrades under LGIP Section 6.3.1. The responsibility to finance final Reliability Network Upgrades identified through a Group Study in the Phase II Interconnection Study shall be assigned to all Interconnection Requests in that Group Study pro rata on the basis of the maximum megawatt electrical output of each proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed by the Interconnection Customer in its Interconnection Request up to the cost assignment for Reliability Network Upgrades under LGIP Section 6.3.1.<sup>657</sup>

### 7.4 Financing of Delivery Network Upgrades.<sup>658</sup>

The responsibility to finance all Delivery Network Upgrades identified in the On-Peak Deliverability Assessment and Off-Peak Deliverability Assessment as part of Phase II Interconnection Study shall be assigned to all Interconnection Requests selecting Full Capacity Deliverability Status based on the flow impact of each such Large Generating Facility on each Delivery Network Upgrade as determined by the Generation distribution factor methodology set forth in the On-Peak and Off-Peak Deliverability Assessment methodologies. The financing responsibility shall be up to, but no greater than, the cost assignment for Delivery Network Upgrades for each Interconnection Request under LGIP Sections 6.3.2.1 and 6.3.2.2.<sup>659</sup>

### 8.3<sup>660</sup> 7.5<sup>661</sup>

#### Phase II<sup>662</sup> Interconnection-Facilities<sup>663</sup> Study Procedures.

The CAISO shall coordinate the Phase II<sup>664</sup> Interconnection Facilities<sup>665</sup> Study with the applicable<sup>666</sup> Participating TO(s) and any Affected System that is affected by the Interconnection Request<sup>668</sup> pursuant to LGIP Section 3.7 above.<sup>669</sup> 3.7.<sup>670</sup> Existing studies shall be used to the extent practicable when<sup>671</sup> conducting the Phase II<sup>672</sup> Interconnection Facilities<sup>673</sup> Study. The CAISO, in collaboration<sup>674</sup> will coordinate<sup>675</sup>

Base Case development<sup>676</sup> with the applicable<sup>677</sup> Participating TO(s),<sup>678</sup> TOs to ensure the Base Cases are accurately developed. The CAISO<sup>679</sup> shall use Reasonable Efforts to complete the study and issue a draft Interconnection Facilities<sup>680</sup> **and publish to Interconnection Customers the Phase II Interconnection Study report within three hundred thirty (330) calendar days from January 1 of each calendar year**<sup>681</sup>. The CAISO will share applicable study results with the applicable Participating TO(s), for review and comment, and will incorporate comments into the study report. The CAISO will issue a final<sup>682</sup> **Phase II Interconnection**<sup>683</sup> Study report to the Interconnection Customer. Prior to issuing draft study results to the Interconnection Customer, the CAISO shall share study results with the Participating TO(s) for review and incorporate comments as necessary. Within the following number of days after receipt of an executed Interconnection Facilities Study Agreement, the CAISO shall provide a draft Interconnection Facilities Study report to the Interconnection Customer: one hundred twenty (120) calendar days, with no more than a +/- 20 percent cost estimate contained in the report; or two hundred ten (210) calendar days, if the Interconnection Customer requests a +/- 10 percent cost estimate.<sup>684</sup>

At the request of the Interconnection Customer or at any time the CAISO determines that **it will not meet**<sup>685</sup> the required time frame for completing the **Phase II**<sup>686</sup> Interconnection Facilities<sup>687</sup> Study will not be met<sup>688</sup>, the CAISO shall notify the Interconnection Customer as to the schedule status of the Interconnection Facilities Study. If the Interconnection Facilities Study cannot be conducted and a draft Interconnection Facilities Study report cannot be issued within the time required, the CAISO shall notify the Interconnection Customer<sup>689</sup> **Phase II Interconnection Study**<sup>690</sup> and provide an estimated completion date and<sup>691</sup> with<sup>692</sup> an explanation of the reasons why additional time is required.

The Interconnection Customer shall, within thirty (30) calendar days after receipt of the draft report, either (i) provide written comments to the CAISO, which the CAISO, to the extent the comments are applicable, shall include in the final report, or (ii) provide a statement to the Participating TO and CAISO that it will not provide comments. The CAISO shall issue the final Interconnection Facilities Study report within fifteen (15) Business Days of receiving the Interconnection Customer's comments or promptly upon receiving the Interconnection Customer's statement that it will not provide comments. The CAISO may reasonably extend such fifteen (15) Business Day period upon notice to the Interconnection Customer if the Interconnection Customer's comments require the applicable Participating TO(s) and/or CAISO to perform additional analyses or make other significant modifications prior to the issuance of the final Interconnection Facilities Study report.<sup>693</sup> Upon request, the CAISO shall provide the Interconnection Customer all<sup>694</sup> supporting documentation, workpapers, and databases or data developed in the preparation of the Interconnection Facilities<sup>695</sup> and relevant pre-Interconnection Request and post-Interconnection Request power flow, short circuit and stability databases for the<sup>696</sup> **Phase II Interconnection**<sup>697</sup> Study, subject to confidentiality arrangements consistent with LGIP Section 13.1.

## **7.6. Accelerated Phase II Interconnection Study Process.**<sup>698</sup>

**The Phase II Interconnection Study shall be completed within one hundred fifty (150) calendar days following the posting of the initial Interconnection Financial Security under LGIP Section 9 where the Interconnection Request meets the following criteria: (i) the Interconnection Request was not grouped with any other Interconnection Requests during the Phase I Interconnection Study or was identified as interconnecting to a point of available transmission during the Phase I Interconnection Study, and (ii) the Interconnection Customer is able to**

**demonstrate that the general Phase II Interconnection Study timeline under LGIP Section 7.5 is not sufficient to accommodate the Commercial Operation Date of the Large Generating Facility.**<sup>699</sup>

**In addition to the above criteria, the CAISO may apply to FERC in coordination with the Interconnection Customer for a waiver of the timelines in this LGIP to meet the schedule required by an order, ruling, or regulation of the Governor of the State of California, the CPUC, or the CEC.**<sup>700</sup>

8.4<sup>701</sup> 7.7<sup>702</sup>

#### **Meeting with the CAISO and Applicable Participating TO(s).**

Within ten (10) Business Days<sup>703</sup> **thirty (30) calendar days**<sup>704</sup> of providing a draft **the final Phase II**<sup>706</sup> Interconnection Facilities<sup>707</sup> Study report to the Interconnection Customer, the applicable Participating TO(s), the CAISO and the Interconnection Customer shall meet to discuss the results of the Interconnection Facilities Study. Within ten (10) Business Days of this meeting the Interconnection Customer shall make the election of which<sup>708</sup> ~~Delivery Network Upgrades~~<sup>709</sup> identified in the Interconnection Facilities Study are to be installed. Any operating constraints on the Interconnection Customer's Generating Facility arising out of the Interconnection Customer's election not to install the Delivery Network Upgrades shall be as set forth in Article 9 and Appendix C of the LGIA.<sup>710</sup> **Phase II Interconnection Study, including selection of the final Commercial Operation Date.**<sup>711</sup>

**Section 8** [NOT USED]<sup>712</sup>

**Section 9** Interconnection Financial Security.<sup>713</sup>

**9.1** Types of Interconnection Financial Security.<sup>714</sup>

**The Interconnection Financial Security posted by an Interconnection Customer may be any combination of the following types of Interconnection Financial Security provided in favor of the applicable Participating TO(s):**<sup>715</sup>

**(a) an irrevocable and unconditional letter of credit issued by a bank or financial institution that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's;**<sup>716</sup>

**(b) an irrevocable and unconditional surety bond issued by an insurance company that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's;**<sup>717</sup>

**(c) an unconditional and irrevocable guaranty issued by a company has a credit rating of A or better by Standard and Poors or A2 or better by Moody's;**<sup>718</sup>

**(d) a cash deposit standing to the credit of the CAISO and applicable Participating TO(s) in an interest-bearing escrow account maintained at a bank or financial institution that is reasonably acceptable to the CAISO;**<sup>719</sup>

**(e) a certificate of deposit in the name of the CAISO issued by a bank or financial institution that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's; or**<sup>720</sup>

**(f) a payment bond certificate in the name of the CAISO issued by a bank or financial institution that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's.**<sup>721</sup>

**Interconnection Financial Security instruments as listed above shall be in such form as the CAISO and applicable Participating TO(s) may reasonably require from time to time by notice to Interconnection Customers or in such other form as has been evaluated and approved as reasonably acceptable by the CAISO and applicable Participating TO(s). The CAISO shall publish and maintain standardized forms related to the types of Interconnection Financial Security listed above on the CAISO Website. The CAISO shall require the use of standardized forms of Interconnection Financial Security to the greatest extent possible. If at any time the guarantor of the Interconnection Financial Security fails to maintain the credit rating required by this LGIP Section 9.1, the Interconnection Customer shall provide to the CAISO replacement Interconnection Financial Security meeting the requirements of this LGIP Section 9.1 within five (5) Business Days of the change in credit rating.**<sup>722</sup>

**Interest on a cash deposit standing to the credit of the CAISO in an interest-bearing escrow account under subpart (d) of this LGIP Section 9.1 will accrue to the Interconnection Customer's benefit and will be added to the Interconnection Customer's account on a monthly basis.**<sup>723</sup>

## **9.2 Initial Posting of Interconnection Financial Security.**<sup>724</sup>

**On or before ninety (90) calendar days after publication of the final Phase I Interconnection Study report, Interconnection Customers must post, with notice to the CAISO, two separate Interconnection Financial Security instruments (i) in the amount of twenty percent (20%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study for Network Upgrades, or \$500,000, whichever is greater, and (ii) in the amount of twenty percent (20%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study for Participating TO's Interconnection Facilities. The failure by an Interconnection Customer to timely post, and notify the CAISO of the posting of, the Interconnection Financial Security required by this LGIP Section 9.2 shall result in the Interconnection Request being deemed withdrawn and subject to LGIP Section 3.8.**<sup>725</sup>

## **9.3 Second Posting of Interconnection Financial Security.**<sup>726</sup>

**On or before one hundred eighty (180) calendar days after publication of the final Phase II Interconnection Study report or at the start of Construction Activities of Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer, whichever is earlier, the Interconnection Customer must post separate Interconnection Financial Security instruments in the total amount of one hundred percent (100%) of the total cost responsibility assigned to the Interconnection Customer (i) in the final Phase I Interconnection Study for Network Upgrades, if greater than \$500,000, and (ii) in the final Phase II Interconnection Study for Participating TO's Interconnection Facilities. The start date for Construction Activities of Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer must be set forth in the Interconnection Customer's LGIA if that start date is prior to one hundred eighty (180) calendar days after publication of the final Phase II Interconnection Study report. The failure by an Interconnection Customer to**



timely post the Interconnection Financial Security required by this LGIP Section 9.2 shall constitute grounds for termination of the LGIA pursuant to LGIA Article 2.3.<sup>727</sup>

**9.4 General Effect of Withdrawal of Interconnection Request or Termination of the LGIA on Interconnection Financial Security.**<sup>728</sup>

Except as set forth in LGIP Section 9.4.1, withdrawal of an Interconnection Request or termination of an LGIA shall allow the applicable Participating TO(s) to liquidate the Interconnection Financial Security, or balance thereof, posted by the Interconnection Customer for Network Upgrades at the time of withdrawal. To the extent the amount of the liquidated Interconnection Financial Security plus capital, if any, separately provided by the Interconnection Customer to satisfy its obligation to finance Network Upgrades in accordance with LGIP Section 12.3 exceeds the total cost responsibility for Network Upgrades assigned to the Interconnection Customer by the Phase I Interconnection Study, the applicable Participating TO(s) shall remit to the Interconnection Customer the excess amount.<sup>729</sup>

Withdrawal of an Interconnection Request or termination of an LGIA shall result in the release to the Interconnection Customer of any Interconnection Financial Security posted by the Interconnection Customer for Participating TO's Interconnection Facilities, except with respect to any amounts necessary to pay for costs incurred or irrevocably committed by the applicable Participating TO(s) on behalf of the Interconnection Customer for the Participating TO's Interconnection Facilities and for which the applicable Participating TO(s) has not been reimbursed.<sup>730</sup>

**9.4.1 Conditions for Partial Recovery of Interconnection Financial Security Upon Withdrawal of Interconnection Request or Termination of LGIA.**<sup>731</sup>

A portion of the Interconnection Financial Security shall be released to the Interconnection Customer, consistent with LGIP Section 9.4.2, if the withdrawal of the Interconnection Request or termination of the LGIA occurs for any of the following reasons:<sup>732</sup>

- (a) Failure to Secure a Power Purchase Agreement. At the time of withdrawal of the Interconnection Request or termination of the LGIA, the Interconnection Customer demonstrates to the CAISO that it has failed to secure an acceptable power purchase agreement for the Energy or capacity of the Large Generating Facility after a good faith effort to do so. A good faith effort can be established by demonstrating participation in a competitive solicitation process or bilateral negotiations with an entity other than an Affiliate that progressed, at minimum, to the mutual exchange by all counter-parties of proposed term sheets.**<sup>733</sup>
- (b) Failure to Secure a Necessary Permit. At the time of withdrawal of the Interconnection Request or termination of the LGIA, the Interconnection Customer demonstrates to the CAISO that it has received a final denial from the primary issuing Governmental Authority of any permit or other authorization necessary for the construction or operation of the Large Generating Facility.**<sup>734</sup>

**(c) Increase in the Cost of Participating TO's Interconnection Facilities. The Interconnection Customer withdraws the Interconnection Request or terminates the LGIA based on an increase of more than 30% or \$300,000, whichever is greater, in the estimated cost of Participating TO's Interconnection Facilities between the Phase I Interconnection Study and the Phase II Interconnection Study.**<sup>735</sup>

**(d) Material Change in Interconnection Customer Interconnection Facilities Created by a CAISO Change in the Point of Interconnection. The Interconnection Customer withdraws the Interconnection Request or terminates the LGIA based on a material change from the Phase I Interconnection Study in the Point of Interconnection for the Large Generating Facility mandated by the CAISO and included in the final Phase II Interconnection Study. A material change in the Point of Interconnection shall be where Point of Interconnection has moved to (i) a different substation, (ii) a different line on a different right of way, or (iii) a materially different location than previously identified on the same line.**<sup>736</sup>

#### **9.4.2 Schedule for Determining Non-Refundable Portion of the Interconnection Financial Security for Network Upgrades.**<sup>737</sup>

##### **9.4.2.1 Up to One Hundred Eighty Days After Final Phase II Interconnection Study Report.**<sup>738</sup>

**If, at any time after the initial posting of the Interconnection Financial Security for Network Upgrades under LGIP Section 9.2 and on or before one hundred eighty (180) calendar days after the date of issuance of the final Phase II Interconnection Study report, the Interconnection Customer withdraws the Interconnection Request or terminates the LGIA, as applicable, in accordance with LGIP Section 9.4.1, the applicable Participating TO(s) shall liquidate the Interconnection Financial Security for Network Upgrades under LGIP Section 9.2 and reimburse the Interconnection Customer in an amount of (i) fifty percent (50%) of the value of the posted Interconnection Financial Security for Network Upgrades, or, (ii) if the Interconnection Financial Security has been drawn down to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer, the lesser of the remaining balance of the Interconnection Financial Security or the amount calculated under (i) above. If the Interconnection Customer has separately provided capital apart from the Interconnection Financial Security to finance Pre-Construction Activities for Network Upgrades, the applicable Participating TO(s) will credit the capital provided as if drawn from the Interconnection Financial Security and apply (ii) above.**<sup>739</sup>

##### **9.4.2.2 Between One Hundred Eighty-One Days and Three Hundred Sixty-Five Days After Final Phase II Interconnection Study Report.**<sup>740</sup>

**If, at any time between one hundred eighty-one (181) calendar days and three hundred sixty-five (365) calendar days after the date of issuance of the final Phase II Interconnection Study report, the Interconnection Customer withdraws the Interconnection Request or terminates the LGIA, as applicable, in accordance with LGIP Section 9.4.1, the applicable Participating TO(s) shall liquidate the Interconnection Financial Security for Network Upgrades under LGIP Section 9.3 and reimburse the Interconnection Customer in an amount of (i) fifty percent (50%) of the posted value of the Interconnection Financial Security for Network Upgrades, or, (ii) if the Interconnection Financial Security has been drawn down to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer, the lesser of the remaining balance of the**

Interconnection Financial Security or the amount calculated under (i) above. If the Interconnection Customer has separately provided capital apart from the Interconnection Financial Security to finance Pre-Construction Activities for Network Upgrades, the applicable Participating TO(s) will credit the capital provided as if drawn from the Interconnection Financial Security and apply (ii) above.<sup>741</sup>

**9.4.2.3 Between Three Hundred Sixty-Six Days and Five Hundred Forty-Five Days After Final Phase II Interconnection Study Report.**<sup>742</sup>

If, at any time between three hundred sixty-six (366) calendar days and five hundred forty-five (545) calendar days after the date of issuance of the final Phase II Interconnection Study report, the Interconnection Customer withdraws the Interconnection Request or terminates the LGIA, as applicable, in accordance with LGIP Section 9.4.1, the applicable Participating TO(s) shall liquidate the Interconnection Financial Security for Network Upgrades under LGIP Section 9.3 and reimburse the Interconnection Customer in an amount of (i) twenty percent (20%) of the posted value of the Interconnection Financial Security for Network Upgrades, or, (ii) if the Interconnection Financial Security has been drawn down to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer, the lesser of remaining balance of the Interconnection Financial Security or the amount calculated under (i) above. If the Interconnection Customer has separately provided capital apart from the Interconnection Financial Security to finance Pre-Construction Activities for Network Upgrades, the applicable Participating TO(s) will credit the capital provided as if drawn from the Interconnection Financial Security and apply (ii) above.<sup>743</sup>

**9.4.2.4 Special Treatment Based on Failure to Obtain Necessary Permit or Authorization from Governmental Authority.**<sup>744</sup>

If, at any time after the posting requirement under LGIP Section 9.3, the Interconnection Customer withdraws the Interconnection Request or terminates the LGIA, as applicable, in accordance with LGIP Section 9.4.1(b), and the<sup>745</sup>  
Delivery Network Upgrades<sup>746</sup> to be financed by the Interconnection Customer under LGIP Section 7.3 are also to be financed by one or more other Interconnection Customers, then LGIP Section 9.4.2.1 shall apply, except that the Interconnection Customer shall not be reimbursed for its share of any actual costs incurred or irrevocably committed by the applicable Participating TO(s) for Construction Activities.<sup>747</sup>

**9.4.2.5 After Commencement of Construction Activities.**<sup>748</sup>

**8.5 — Re-Study.**<sup>749</sup>

Except as otherwise provided in LGIP Section 9.4.2.4, once Construction Activities on Network Upgrades on behalf of the Interconnection Customer commence, any withdrawal of the Interconnection Request or termination of the LGIA by the Interconnection Customer will be treated in accordance with this LGIP Section 9.4.<sup>750</sup>

If re-study of the Interconnection Facilities Study is required due to a higher queued project dropping out of the queue or a modification of a higher queued project pursuant to LGIP Section 4.4, or any other effective change in information which necessitates a re-study, the CAISO shall so notify the Interconnection Customer in writing. Upon receipt of such notice, the Interconnection Customer shall provide the CAISO within ten (10)

~~Business Days a written request that the CAISO either (i) terminate the study and withdraw the Interconnection Request; or (ii) continue the study. If the Interconnection Customer requests the CAISO to continue the study, the Interconnection Customer shall pay the CAISO an additional \$10,000 deposit for the re-study along with providing written notice for the CAISO to continue.~~<sup>751</sup>

**9.4.2.6 Notification to CAISO and Accounting by Applicable Participating TO(s).**<sup>752</sup>

~~Such re-study shall take no longer than sixty (60) calendar days from the date the CAISO receives the Interconnection Customer's written notice to continue the study and payment of the additional \$10,000 deposit. The CAISO shall share applicable study results with the applicable Participating TO(s) for review and comment and incorporate comments, as appropriate. The CAISO will issue a final Interconnection Facilities Study report to the Interconnection Customer within eighty (80) calendar days following receipt of the Interconnection Customer's written notice to continue the study and payment of the additional \$10,000 deposit. If the Interconnection Facilities Study cannot be completed within that time period, the CAISO shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required. Any and all costs of re-study shall be borne by the Interconnection Customer being re-studied.~~<sup>753</sup>

**The applicable Participating TO(s) must notify the CAISO within one (1) Business Day of liquidating any Interconnection Financial Security. Within twenty (20) calendar days of any liquidating event, the applicable Participating TO(s) must provide the CAISO and Interconnection Customer with an accounting of the disposition of the proceeds of the liquidated Interconnection Financial Security and remit to the CAISO all proceeds not otherwise reimbursed to the Interconnection Customer or applied to costs incurred or irrevocably committed by the applicable Participating TO(s) on behalf of the Interconnection Customer in accordance with this LGIP Section 9.4. All non-refundable portions of the Interconnection Financial Security remitted to the CAISO in accordance with this LGIP Section 9.4 shall be treated in accordance with CAISO Tariff Section 37.9.4.**<sup>754</sup>

**Section 9.**<sup>755</sup> **10**<sup>756</sup> **Engineering & Procurement ("E&P") Agreement.**

Prior to executing an LGIA, an Interconnection Customer may, in order to advance the implementation of its interconnection, request and the applicable Participating TO(s) shall offer the Interconnection Customer, an E&P Agreement that authorizes the applicable Participating TO(s) to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. However, the applicable Participating TO(s) shall not be obligated to offer an E&P Agreement if the Interconnection Customer is in Dispute Resolution as a result of an allegation that the Interconnection Customer has failed to meet any milestones or comply with any prerequisites specified in other parts of the LGIP. The E&P Agreement is an optional procedure and it will not alter the Interconnection Customer's Queue Position or In-Service Date<sup>757</sup>. The E&P Agreement shall provide for the Interconnection Customer to pay the cost of all activities authorized by the Interconnection Customer and to make advance payments or provide other satisfactory security for such costs.

The Interconnection Customer shall pay the cost of such authorized activities and any cancellation costs for equipment that is already ordered for its interconnection, which cannot be mitigated as hereafter described, whether or not such items or equipment later become unnecessary. If the Interconnection Customer withdraws its application for interconnection or either Party terminates the E&P Agreement, to the extent the equipment ordered can be canceled under reasonable terms, the Interconnection Customer shall be obligated to pay the associated cancellation costs. To the extent that the equipment cannot be reasonably canceled, the applicable Participating TO(s) may

elect: (i) to take title to the equipment, in which event the applicable Participating TO(s) shall refund the Interconnection Customer any amounts paid by Interconnection Customer for such equipment and shall pay the cost of delivery of such equipment, or (ii) to transfer title to and deliver such equipment to the Interconnection Customer, in which event the Interconnection Customer shall pay any unpaid balance and cost of delivery of such equipment.

## **Section 10. ~~Optional Interconnection Study.~~<sup>758</sup>**

### **10.1 ~~Optional Interconnection Study Agreement.~~<sup>759</sup>**

~~On or after the date when the Interconnection Customer receives Interconnection System Impact Study results, the Interconnection Customer may request, and the CAISO shall conduct or cause to be conducted, a reasonable number of Optional Interconnection Studies. The request shall describe the assumptions that the Interconnection Customer wishes to be studied within the scope described in LGIP Section 10.2. Within five (5) Business Days after receipt of a request for an Optional Interconnection Study, the CAISO shall provide to the Interconnection Customer an Optional Interconnection Study Agreement.<sup>760</sup>~~

~~The Optional Interconnection Study Agreement shall: (i) specify the technical data that the Interconnection Customer must provide for each phase of the Optional Interconnection Study, (ii) specify the Interconnection Customer's assumptions as to which Interconnection Requests with higher Queue Positions will be excluded from the Optional Interconnection Study case and assumptions as to the type of interconnection service for Interconnection Requests remaining in the Optional Interconnection Study case, and (iii) the CAISO's estimate of the cost of the Optional Interconnection Study. To the extent known by the CAISO, such estimate shall include any costs expected to be incurred by any Affected System whose participation is necessary to complete the Optional Interconnection Study. Notwithstanding the above, the CAISO shall not be required as a result of an Optional Interconnection Study request to conduct any additional Interconnection Studies with respect to any other Interconnection Request.<sup>761</sup>~~

~~The Interconnection Customer shall execute the Optional Interconnection Study Agreement within ten (10) Business Days of receipt and deliver the Optional Interconnection Study Agreement, the technical data and a \$10,000 deposit to the CAISO as applicable.<sup>762</sup>~~

### **10.2 ~~Scope of Optional Interconnection Study.~~<sup>763</sup>**

~~The Optional Interconnection Study will consist of a sensitivity analysis based on the assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement. The Optional Interconnection Study will also identify the Participating TOs' Interconnection Facilities and the Network Upgrades, and the estimated cost thereof, that may be required to provide transmission service or Interconnection Service based upon the results of the Optional Interconnection Study. The Optional Interconnection Study shall be performed solely for informational purposes. The CAISO shall use Reasonable Efforts to coordinate the study with any Affected Systems that may be affected by the types of Interconnection Services that are being studied. The CAISO shall utilize existing studies to the extent practicable in conducting the Optional Interconnection Study.<sup>764</sup>~~

### **10.3 ~~Optional Interconnection Study Procedures.~~<sup>765</sup>**

The CAISO shall use Reasonable Efforts to have the Optional Interconnection Study completed within a mutually agreed upon time period specified within the Optional Interconnection Study Agreement. If the Optional Interconnection Study cannot be completed within such time period, the CAISO shall notify the Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required. Any difference between the study payment and the actual cost of the study shall be paid to the CAISO, as applicable, or refunded to the Interconnection Customer, as appropriate. Upon request, the CAISO with support and cooperation of the applicable Participating TO(s) shall provide the Interconnection Customer supporting documentation and workpapers, and databases or data developed in the preparation of the Optional Interconnection Study, subject to confidentiality arrangements consistent with LGIP Sections 2.3 and 13.1. <sup>766</sup>**Section 11. Standard** <sup>767</sup>**11** <sup>768</sup>**Large Generator Interconnection Agreement (LGIA).**

## 11.1 Tender.

11.1.1 Within thirty (30) calendar days <sup>769</sup>**fifteen (15) Business Days** <sup>770</sup> after the CAISO receives <sup>771</sup> the Interconnection Customer <sup>772</sup>'s written comments, or notification of no comments, to the draft <sup>773</sup>**provides the final Phase II** <sup>774</sup> Interconnection Facilities <sup>775</sup> Study report **to** <sup>776</sup> the Interconnection Customer <sup>777</sup>, the applicable Participating TO(s) and the CAISO shall tender a draft LGIA, together with draft appendices. The draft LGIA shall be in the form of the FERC-approved standard form LGIA <sup>778</sup>**form of LGIA set forth in CAISO Tariff Appendix Z** <sup>779</sup>. The Interconnection Customer shall provide written comments, or notification of no comments, to the draft appendices to the applicable Participating TO(s) and the CAISO within (30) calendar days of receipt.

11.1.2 Consistent with **LGIP** <sup>780</sup> Sections 3.4.4 <sup>781</sup>**13.3** <sup>782</sup> and 11.1.1 of this LGIP, <sup>783</sup>**11.1.1**, <sup>784</sup> when the transmission system of a Participating TO, in which the Point of Interconnection is not located, is affected, such Participating TO shall tender a separate agreement, in the form of the LGIA, as appropriately modified.

## 11.2 Negotiation.

Notwithstanding LGIP Section 11.1, at the request of the Interconnection Customer, the applicable Participating TO(s) and CAISO shall begin negotiations with the Interconnection Customer concerning the appendices to the LGIA at any time after the **CAISO provides the** <sup>785</sup> Interconnection Customer <sup>786</sup> executes <sup>787</sup> **with** the **final Phase II** <sup>788</sup> Interconnection Facilities <sup>789</sup> Study Agreement <sup>790</sup> **report** <sup>791</sup>. The applicable Participating TO(s) and CAISO and the Interconnection Customer shall negotiate concerning any disputed provisions of the appendices to the draft LGIA for not more than sixty <sup>792</sup> **ninety** <sup>793</sup> (60 <sup>794</sup> **90** <sup>795</sup>) calendar days after tender of <sup>796</sup> **the CAISO provides the** <sup>797</sup> **Interconnection Customer with** the final **Phase II** <sup>798</sup> Interconnection Facilities <sup>799</sup> Study report. If the Interconnection Customer determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the draft LGIA pursuant to LGIP Section 11.1 and request submission of the unexecuted LGIA with FERC or initiate Dispute Resolution procedures pursuant to LGIP Section 13.5. If the Interconnection Customer requests termination of the negotiations, but <sup>800</sup> within ninety (90) calendar days after issuance of the final **Phase II** <sup>801</sup> Interconnection Facilities <sup>802</sup> Study report, <sup>803</sup> fails to request either the filing of the unexecuted LGIA or initiate Dispute Resolution, it shall be deemed to have withdrawn its Interconnection Request. Unless otherwise agreed by the Parties, if the Interconnection Customer has not executed and returned the LGIA, requested filing of an unexecuted LGIA, or initiated Dispute Resolution procedures pursuant to LGIP Section 13.5 within ninety (90) calendar

days after issuance of the final **Phase II**<sup>804</sup> Interconnection Facilities<sup>805</sup> Study report, it shall be deemed to have withdrawn its Interconnection Request. The applicable Participating TO(s) and CAISO shall provide to the Interconnection Customer a final LGIA within fifteen (15) Business Days after the completion of the negotiation process.

### 11.3 Execution and Filing.

~~At the time that the Interconnection Customer either returns the executed LGIA or requests the filing of an unexecuted LGIA as specified below, the Interconnection Customer shall provide the applicable Participating TO(s) and CAISO (A) reasonable evidence of continued Site Control or (B) posting to the applicable Participating TO(s) of \$250,000, non-refundable additional security, which shall be applied toward future construction costs. At the same time, the Interconnection Customer also shall provide reasonable evidence that one or more of the following milestones in the development of the Large Generating Facility, at the Interconnection Customer election, has been achieved: (i) the execution of a contract for the supply or transportation of fuel to the Large Generating Facility; (ii) the execution of a contract for the supply of cooling water to the Large Generating Facility; (iii) execution of a contract for the engineering for, procurement of major equipment for, or construction of, the Large Generating Facility; (iv) execution of a contract for the sale of electric energy or capacity from the Large Generating Facility; or (v) application for an air, water, or land use permit.~~<sup>806</sup>

The Interconnection Customer shall either: (i) execute ~~four~~<sup>807</sup> **the appropriate number of**<sup>808</sup> originals of the tendered LGIA **as specified in the directions provided by the CAISO**<sup>809</sup> and return ~~one to the applicable Participating TO(s) and two~~<sup>810</sup> **them**<sup>811</sup> to the CAISO, **as directed, for completion of the execution process**<sup>812</sup>; or (ii) request in writing that the applicable Participating TO(s) and CAISO file with FERC an LGIA in unexecuted form. **The LGIA shall be considered executed as of the date that all three Parties have signed the LGIA**<sup>813</sup>. As soon as practicable, but not later than ten (10) Business Days after receiving either the executed originals of the tendered LGIA (if it does not conform with a FERC-approved standard form of interconnection agreement) or the request to file an unexecuted LGIA, the applicable Participating TO(s) and CAISO shall file the LGIA with FERC, as necessary, together with an explanation of any matters as to which the Interconnection Customer and the applicable Participating TO(s) or CAISO disagree and support for the costs that the applicable Participating TO(s) propose to charge to the Interconnection Customer under the LGIA. An unexecuted LGIA should contain terms and conditions deemed appropriate by the applicable Participating TO(s) and CAISO for the Interconnection Request. If the Parties agree to proceed with design, procurement, and construction of facilities and upgrades under the agreed-upon terms of the unexecuted LGIA, they may proceed pending FERC action.

### 11.4 Commencement of Interconnection Activities.

If the Interconnection Customer executes the final LGIA, the applicable Participating TO(s), CAISO and the Interconnection Customer shall perform their respective obligations in accordance with the terms of the LGIA, subject to modification by FERC. Upon submission of an unexecuted LGIA, the Interconnection Customer, applicable Participating TO(s) and CAISO may proceed to comply with the unexecuted LGIA, pending FERC action.

### 11.5 Interconnection Customer to Meet Requirements of the Participating TO's Interconnection Handbook.

The Interconnection Customer's Interconnection Facilities shall be designed, constructed, operated and maintained in accordance with the applicable Participating TO's Interconnection Handbook.

**Section 12.<sup>814</sup> 12<sup>815</sup> Construction of Participating TO's Interconnection Facilities and Network Upgrades, and Funding of<sup>816</sup> Network Upgrades.**

**12.1 Schedule.**

The applicable Participating TO(s) and the Interconnection Customer shall negotiate in good faith concerning a schedule for the construction of the applicable Participating TO's Interconnection Facilities and the Network Upgrades.

**12.2 Construction Sequencing.**

**12.2.1 General.**

In general, the In-Service Date in the LGIA of an Interconnection Customer seeking interconnection to the CAISO Controlled Grid will determine the sequence of construction of Network Upgrades.<sup>817</sup>

**In general, the sequence of construction of Stand Alone Network Upgrades or other Network Upgrades for a single Interconnection Request, or Network Upgrades identified for the interconnection of Generating Facilities associated with multiple Interconnection Requests, shall be determined, to the maximum extent practical, in a manner that accommodates the proposed Commercial Operation Date set forth in the LGIA of the Interconnection Customer(s) associated with the Stand Alone Network Upgrades or other Network Upgrades.**<sup>818</sup>

**12.2.2 Advance<sup>819</sup> Construction of Network Upgrades that are or were<sup>820</sup> an Obligation of an Entity other than the Interconnection Customer.**

~~An<sup>821</sup> The<sup>822</sup> applicable Participating TO(s)<sup>823</sup> shall be responsible for financing and constructing any Network Upgrades necessary to support the interconnection of the Generating Facility of an~~<sup>824</sup> Interconnection Customer with an LGIA, in order to maintain its In-Service Date, may request that the<sup>825</sup> applicable Participating TO(s)<sup>826</sup> advance to the extent necessary the completion of Network Upgrades that: (i) were assumed in the Interconnection Studies for such Interconnection Customer, (ii) are necessary to support such In-Service Date, and (iii) would otherwise not be completed, pursuant to a contractual obligation of an entity other than the Interconnection Customer that is seeking interconnection to the CAISO Controlled Grid, in time to support such In-Service Date. Upon such request, the applicable Participating TO(s) will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay the applicable Participating TO(s): (i) any associated expediting costs and (ii) the cost of such Network Upgrades.<sup>827</sup> **under this LGIP, whenever either:**<sup>828</sup>

**(i) the Network Upgrades were included in the Interconnection Base Case Data for a Phase II Interconnection Study on the basis that they were Network Upgrades associated with Generating Facilities of Interconnection Customers that have an executed LGIA (or its equivalent predecessor agreement) or unexecuted LGIA (or its equivalent predecessor agreement) filed with FERC, but the Network Upgrades will not otherwise be completed because such LGIA or equivalent predecessor agreement was**



subsequently terminated or the Interconnection Request has otherwise been withdrawn; or<sup>829</sup>

(ii) the Network Upgrades were included in the Interconnection Base Case Data for a Phase II Interconnection Study on the basis that they were Network Upgrades associated with Generating Facilities of Interconnection Customers that have an executed LGIA (or its equivalent predecessor agreement) or unexecuted LGIA (or its equivalent predecessor agreement) filed with FERC, but the Network Upgrades will not otherwise be completed in time to support the Interconnection Customer's In-Service Date because construction has not commenced in accordance with the terms of such LGIA (or its equivalent predecessor agreement).<sup>830</sup>

The obligation under this LGIP Section 12.2.2 arises only after the CAISO, in coordination with the applicable Participating TO(s), determines that the Network Upgrades remain needed to support the interconnection of the Interconnection Customer's Generating Facility notwithstanding, as applicable, the absence or delay of the Generating Facility that is contractually, or was previously contractually, associated with the Network Upgrades.<sup>831</sup>

Further, to the extent the timing of such Network Upgrades was not accounted for in determining a reasonable Commercial Operation Date among the CAISO, applicable Participating TO(s), and the Interconnection Customer as part of the Phase II Interconnection Study, the applicable Participating TO(s) will use Reasonable Efforts to ensure that the construction of such Network Upgrades can accommodate the Interconnection Customer's proposed Commercial Operation Date. If, despite Reasonable Efforts, it is anticipated that the Network Upgrades cannot be constructed in time to accommodate the Interconnection Customer's proposed Commercial Operation Date, the Interconnection Customer may commit to pay the applicable Participating TO(s) any costs associated with expediting construction of the Network Upgrades to meet the original proposed Commercial Operation Date. The expediting costs under this LGIP Section 12.2.2 shall be in addition to the Interconnection Customer's cost responsibility assigned under LGIP Section 6.3.<sup>832</sup>

The applicable Participating TO(s) will refund to the Interconnection Customer both the expediting costs and the cost of Network Upgrades, in accordance with Article 11.4 of the LGIA. Consequently, the entity with a contractual obligation to construct such Network Upgrades shall be obligated to pay only that portion of the costs of the Network Upgrades that the applicable Participating TO(s) have not refunded to the Interconnection Customer. Payment by that entity shall be due on the date that it would have been due had there been no request for advance construction. The applicable Participating TO(s) shall forward to the Interconnection Customer the amount paid by the entity with a contractual obligation to construct the Network Upgrades as payment in full for the outstanding balance owed to the Interconnection Customer. The applicable Participating TO(s) then shall refund to that entity the amount that it paid for the Network Upgrades, in accordance with Article 11.4 of the LGIA.<sup>833</sup>

### **12.2.3 Advancing Construction of Network Upgrades that are Part of an Expansion <sup>834</sup> the CAISO's Transmission <sup>835</sup> Plan of the Participating TO <sup>836</sup> .**

An Interconnection Customer with an LGIA, in order to maintain its In-Service Date as specified in the LGIA, may request that the CAISO and<sup>837</sup> applicable Participating TO(s) advance to the extent necessary the completion of Network Upgrades that: (i) are

necessary to support such In-Service Date and (ii) would otherwise not be completed, pursuant to an expansion plan<sup>838</sup> **approved CAISO Transmission Plan covering the PTO Service Territory**<sup>839</sup> of the applicable Participating TO(s), in time to support such In-Service Date. Upon such request, the applicable Participating TO(s) will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay the applicable Participating TO(s) any associated expediting costs. The Interconnection Customer shall be entitled to refunds, if any, in accordance with this LGIP and the LGIA, for any expediting costs paid.

### **12.3 Network Upgrades.**<sup>840</sup>

#### **12.3.1 Initial Funding.**<sup>841</sup>

**Unless the applicable Participating TO(s) elects to fund the full capital for identified Reliability and Delivery Network Upgrades, they shall be funded by the Interconnection Customer(s) either by means of drawing down the Interconnection Financial Security or by the provision of additional capital, at each Interconnection Customer's election, up to a maximum amount no greater than that established by the cost responsibility assigned to each Interconnection Customer(s) under LGIP Sections 7.3 and 7.4.**

<sup>842</sup>

**Where the applicable Participating TO(s) does not elect to fund the full capital for specific Reliability and Delivery Network Upgrades, the applicable Participating TO(s) shall be responsible for funding any capital costs for the Reliability and Delivery Network Upgrades that exceed the total cost responsibility assigned to the Interconnection Customer(s) under LGIP Sections 7.3 and 7.4.**<sup>843</sup>

**(a) Where the funding responsibility for any Reliability Network Upgrade or Delivery Network Upgrade has been assigned to a single Interconnection Customer in accordance with this LGIP, and the applicable Participating TO(s) has elected not to fund the full capital of the Reliability Network Upgrade or Delivery Network Upgrade, the applicable Participating TO(s) shall invoice the Interconnection Customer under LGIA Article 12.1 up to a maximum amount no greater than that established by the cost responsibility assigned to each Interconnection Customer(s) under LGIP Sections 7.3 and 7.4 for the Reliability Network Upgrade or Delivery Network Upgrade, respectively.**<sup>844</sup>

**(b) Where the funding responsibility for a Reliability Network Upgrade has been assigned to more than one Interconnection Customer in accordance with this LGIP, and the applicable Participating TO(s) has elected not to fund the full capital of the Reliability Network Upgrade, the applicable Participating TO(s) shall invoice each Interconnection Customer under LGIA Article 12 for such Reliability Network Upgrade based on the ratio of the maximum megawatt electrical output of each new Large Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed the Generating Facility's Interconnection Request to the aggregate maximum megawatt electrical output of all such new Large Generating Facilities and increases in the generating capacity of existing Generating Facilities assigned responsibility for such Reliability Network Upgrade. Each Interconnection Customer may be invoiced up to a maximum amount no greater than that established by the cost responsibility assigned to that Interconnection**

**Customer under LGIP Section 7.3.**<sup>845</sup>

**(c) Where the funding responsibility for a Delivery Network Upgrade has been assigned to more than one Interconnection Customer in accordance with this LGIP, and the applicable Participating TO(s) has elected not to fund the full capital of the Delivery Network Upgrade, the applicable Participating TO(s) shall invoice each Interconnection Customer under LGIA Article 12 for such Delivery Network Upgrade based on the percentage flow impact of each assigned Large Generating Facility on each Delivery Network Upgrade as determined by the Generation distribution factor methodology used in the On-Peak and Off-Peak Deliverability Assessments performed in the Phase II Interconnection Study. Each Interconnection Customer may be invoiced up to a maximum amount no greater than that established by the cost responsibility assigned to that Interconnection Customer under LGIP Section 7.4.**<sup>846</sup>

**Any permissible extension of the Commercial Operation Date of a Large Generating Facility will not alter the Interconnection Customer's obligation to finance Network Upgrades where the Network Upgrades are required to meet the earlier Commercial Operation Date(s) of other Large Generating Facilities that have also been assigned cost responsibility for the Network Upgrades.**<sup>847</sup>

**12.3.2 Repayment of Amounts Advanced for Network Upgrades and Refund of Interconnection Financial Security.**<sup>848</sup>

**Upon the Commercial Operation Date of the Large Generating Facility, which shall be the Commercial Operation Date of the entire Large Generating Facility, if phased**<sup>849</sup>**, the Interconnection Customer shall be entitled to a repayment for the**<sup>850</sup>**Interconnection Customer's contribution to the cost of Network Upgrades in accordance with its cost responsibility assigned under LGIP Sections 7.3 and 7.4.**

<sup>851</sup>**Such amount shall be paid to the Interconnection Customer by the applicable Participating TO(s) on a dollar-for-dollar basis either through (1) direct payments made on a levelized basis over the five-year period commencing on the**<sup>852</sup>**Large Generating Facility's**<sup>853</sup>**Commercial Operation Date; or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years of the Commercial Operation Date. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment. The Interconnection Customer may assign such repayment rights to any person.**<sup>854</sup>

**Instead of direct payments, the Interconnection Customer may elect to receive**<sup>855</sup>**Merchant Transmission**<sup>856</sup>**Congestion Revenue Rights (CRRs) in accordance with**<sup>857</sup>**the CAISO Tariff Section 36.11 associated with the Network Upgrades, or portions thereof that were funded by the Interconnection Customer. Such CRRs would take effect upon the Commercial Operation Date of the Large Generating Facility, which shall be the Commercial Operation Date of the entire Large Generating Facility, if phased, in accordance with the LGIA.**<sup>858</sup>

**12.4**<sup>859</sup>**Special Provisions for Affected Systems and Other Affected Participating TOs.**<sup>860</sup>

#### **12.2.4 Amended Interconnection Study.**<sup>861</sup>

The Interconnection Customer shall enter into an agreement with the owner of the Affected System and/or other affected Participating TO(s), as applicable. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to the owner of the Affected System and/or other affected Participating TO(s) as well as the repayment by the owner of the Affected System and/or other affected Participating TO(s). If the affected entity is another Participating TO, the initial form of agreement will be the LGIA, as appropriately modified.<sup>862</sup>

~~An Interconnection Study will be amended, as needed, to determine the facilities necessary to support the requested In-Service Date as specified in the LGIA. This amended study will include those transmission facilities, Large Generating Facilities and any other generating facilities that are expected to be in service on or before the requested In-Service Date. If an amendment to an Interconnection Study is required, the CAISO shall notify the Interconnection Customer in writing. Upon receipt of such notice, the Interconnection Customer shall provide the CAISO within ten (10) Business Days a written request that the CAISO either (i) terminate the amended study and withdraw the Interconnection Customer's Interconnection Request or (ii) continue with the amended study. If the Interconnection Customer requests the CAISO to continue with the amended study, the Interconnection Customer shall pay the CAISO an additional \$10,000 deposit for the amended study along with providing written notice for the CAISO to continue. Such amended study shall take no longer than sixty (60) calendar days from the date the CAISO receives the Interconnection Customer's written notice to continue the study and payment of the additional \$10,000 deposit. The CAISO shall share applicable study results with the applicable Participating TO(s) for review and comment, and incorporate comments and issue a final study to the Interconnection Customer within eighty (80) calendar days from the date of the Interconnection Customer's written notice to continue the study and payment of the additional \$10,000 deposit. If the amended Interconnection Study cannot be completed within that time period, the CAISO shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required. Any and all costs of the amended study shall be borne by the Interconnection Customer being re-studied.~~<sup>863</sup>  
Any repayment by the owner of the Affected System shall be in accordance with FERC Order No. 2003-B (109 FERC ¶ 61,287).<sup>864</sup>

### **Section 13.**<sup>865</sup> **13**<sup>866</sup> **Miscellaneous.**

#### **13.1 Confidentiality.**

~~Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by any of the Parties to the other Parties prior to the execution of an LGIA.~~<sup>867</sup>

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Parties receiving the information that the information is confidential.

If requested by any Party, the other Parties shall provide in writing, the basis for asserting that the information referred to in this Section warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

The confidentiality provisions of this LGIP are limited to information provided pursuant to this LGIP.

#### **13.1.1 Scope.**

Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or breach of the LGIA; or (6) is required, in accordance with LGIP Section 13.1.6, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the LGIP. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

#### **13.1.2 Release of Confidential Information.**

No Party shall release or disclose Confidential Information to any other person, except to its employees, consultants, Affiliates (limited by FERC's Standards of Conduct requirements set forth in Part 358 of FERC's Regulations, 18 C.F.R. 358), or to parties who may be or considering providing financing to or equity participation with the Interconnection Customer, or to potential purchasers or assignees of the Interconnection Customer, on a need-to-know basis in connection with these procedures, unless such person has first been advised of the confidentiality provisions of this LGIP Section 13.1 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this LGIP Section 13.1.

#### **13.1.3 Rights.**

Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Parties. The disclosure by each Party to the other Parties of Confidential Information shall not be deemed a waiver by a Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

#### **13.1.4 No Warranties.**

By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to the other Parties nor to enter into any further agreements or proceed with any other relationship or joint venture.

#### **13.1.5 Standard of Care.**

Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under these procedures or its regulatory requirements.

### **13.1.6 Order of Disclosure.**

If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Parties with prompt notice of such request(s) or requirement(s) so that the other Parties may seek an appropriate protective order or waive compliance with the terms of the LGIP. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

### **13.1.7 Remedies.**

Monetary damages are inadequate to compensate a Party for another Party's breach of its obligations under this LGIP Section 13.1. Each Party accordingly agrees that the other Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party breaches or threatens to breach its obligations under this LGIP Section 13.1, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the breach of this LGIP Section 13.1, but shall be in addition to all other remedies available at law or in equity. Further, the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this LGIP Section 13.1.

### **13.1.8 Disclosure to FERC, its Staff, or a State.**

Notwithstanding anything in this LGIP Section 13.1 to the contrary, and pursuant to 18 C.F.R. section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to the LGIP, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. section 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other applicable Parties when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner, consistent with applicable state rules and regulations.

### **13.1.9**

Subject to the exception in LGIP Section 13.1.8, any Confidential Information shall not be disclosed by the other Parties to any person not employed or retained by the other Parties, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Parties, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this LGIP or as a transmission service provider or a Balancing Authority including disclosing the Confidential Information to an RTO or ISO or to a subregional, regional or national reliability organization or planning group. The

Party asserting confidentiality shall notify the other Parties in writing of the information it claims is confidential. Prior to any disclosures of another Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

**13.1.10** This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a breach of this provision).

**13.1.11** The Participating TO or CAISO shall, at the Interconnection Customer's election, destroy, in a confidential manner, or return the Confidential Information provided at the time of Confidential Information is no longer needed.

## **13.2 Delegation of Responsibility.**

The CAISO and the Participating TOs may use the services of subcontractors as deemed appropriate to perform their obligations under this LGIP. The applicable Participating TO or CAISO shall remain primarily liable to the Interconnection Customer for the performance of its respective subcontractors and compliance with its obligations of this LGIP. The subcontractor shall keep all information provided confidential and shall use such information solely for the performance of such obligation for which it was provided and no other purpose.

## **~~13.3~~<sup>868</sup> ~~Obligation for Study Costs.~~<sup>869</sup>**

~~The CAISO shall charge and the Interconnection Customer shall pay the actual costs of the Interconnection Studies.<sup>870</sup> Any difference between the study deposit and the actual cost of the applicable Interconnection Study shall be paid by or refunded to the Interconnection Customer. Any invoices for Interconnection Studies shall include a detailed and itemized accounting of the cost of each Interconnection Study. The Interconnection Customer shall pay any such undisputed costs within thirty (30) calendar days of receipt of an invoice therefor.<sup>871</sup> The CAISO shall not be obligated to continue to have any studies conducted unless the Interconnection Customer has paid all undisputed amounts in compliance herewith. In the event an Interconnection Study is performed by the CAISO,<sup>872</sup> or is performed by a third party consultant pursuant to LGIP Section 13.4,<sup>873</sup> the Interconnection Customer shall pay only the costs of those activities performed by the Participating TO to adequately review or validate that Interconnection Study.<sup>874</sup>~~

## **~~13.4~~<sup>875</sup> ~~Third Parties Performing Studies.~~**

~~If (i) at the time of the signing of an Interconnection Study agreement there is disagreement as to the estimated time to complete an Interconnection Study, (ii) the Interconnection Customer receives notice pursuant to LGIP Sections 6.3, 7.4 or 8.3 that an Interconnection Study cannot be completed within the applicable timeframe for such Interconnection Study, or (iii) the Interconnection Customer receives neither the Interconnection Study nor a notice under LGIP Sections 6.3, 7.4 or 8.3 within the applicable timeframe for such Interconnection Study, then the Interconnection Customer may request that the CAISO: (1) utilize a third party consultant reasonably acceptable to the Interconnection Customer, the CAISO, and the Participating TO or (2) utilize the applicable Participating TO(s) to perform such Interconnection Study under the direction of the CAISO. At other times, the Participating TO or CAISO may also utilize a third party~~

consultant to perform such Interconnection Study, either in response to a general request of the Interconnection Customer, or on its own volition.<sup>876</sup>

### **13.3 [NOT USED]**<sup>877</sup>

~~In all cases, use of a third party consultant shall be in accord with Article 26 of the LGIA (Subcontractors) and limited to situations where the CAISO determines that doing so will help maintain or accelerate the study process for the Interconnection Customer's pending Interconnection Request and not interfere with the CAISO's or Participating TO's progress on Interconnection Studies for other pending Interconnection Requests. In cases where the Interconnection Customer requests use of a third party consultant to perform such Interconnection Study, the Interconnection Customer and the Participating TO or CAISO shall negotiate all of the pertinent terms and conditions, including reimbursement arrangements and the estimated study completion date and study review deadline. The applicable Participating TO(s) and the CAISO shall convey all workpapers, data bases, study results and all other supporting documentation prepared to date with respect to the Interconnection Request as soon as practicable upon the Interconnection Customer's request subject to the confidentiality provision in LGIP Section 13.1. In any case, such third party contract may be entered into with the Interconnection Customer, the applicable Participating TO(s), or the CAISO at the Participating TO's or CAISO's discretion. If the Interconnection Customer enters into a third party Interconnection Study agreement, the Interconnection Customer shall provide the Interconnection Study to the CAISO and the Participating TO for review, and such third party Interconnection Study agreement shall provide for reimbursement by the Interconnection Customer of the CAISO's and Participating TO's actual cost of participating in and reviewing the Interconnection Study. In the case of (iii) the Interconnection Customer maintains its right to submit a claim to Dispute Resolution to recover the costs of such third party study. Such third party consultant shall be required to comply with this LGIP, Article 26 of the LGIA (Subcontractors), the CAISO Tariff, and the relevant Participating TO's TO Tariff as would apply if the Participating TO or CAISO were to conduct the Interconnection Study and shall use the information provided to it solely for purposes of performing such services and for no other purposes. The applicable Participating TO(s) and the CAISO shall cooperate with such third party consultant and the Interconnection Customer to complete and issue the Interconnection Study in the shortest reasonable time.<sup>878</sup>~~

### **13.4 [NOT USED]**<sup>879</sup>

## **13.5 Disputes.**

**If an Interconnection Customer disputes withdrawal of its Interconnection Request under LGIP Section 3.8, the CAISO will forward any information regarding the disputed withdrawal received under LGIP Section 3.8 within one (1) Business Day to the LGIP Executive Dispute Committee, consisting of the Vice President responsible for administration of this LGIP, the CAISO Vice President responsible for customer affairs, and an additional Vice President. The LGIP Executive Dispute Committee shall have five (5) Business Days to determine whether or not to restore the Interconnection Request. If the LGIP Executive Dispute Committee concludes that the Interconnection Request should have been withdrawn, the Interconnection Customer may seek relief in accordance with the CAISO ADR Procedures.**<sup>880</sup>

All disputes, **other than those arising from LGIP Section 3.8,**<sup>881</sup> arising out of or in connection with this LGIP whereby relief is sought by or from the CAISO shall be settled in accordance with the CAISO ADR Procedures.

Disputes arising out of or in connection with this LGIP not subject to the CAISO ADR Procedures shall be resolved as follows:



### **13.5.1 Submission.**

In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with the LGIA, the LGIP, or their performance, such Party (the “disputing Party”) shall provide the other Party with written notice of the dispute or claim (“Notice of Dispute”). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) calendar days of the other Party’s receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of the LGIA and LGIP.

### **13.5.2 External Arbitration Procedures.**

Any arbitration initiated under these procedures shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) calendar days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) calendar days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association (“Arbitration Rules”) and any applicable FERC regulations or RTO rules; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this LGIP Section 43,<sup>882</sup> **13.5**,<sup>883</sup> the terms of this LGIP Section 43<sup>884</sup> **13.5**<sup>885</sup> shall prevail.

### **13.5.3 Arbitration Decisions.**

Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) calendar days of appointment and shall notify the Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of the LGIA and LGIP and shall have no power to modify or change any provision of the LGIA and LGIP in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

### **13.5.4 Costs.**

Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

## 13.6 Local Furnishing Bonds.

### 13.6.1 Participating TOs That Own Facilities Financed by Local Furnishing Bonds.

This provision is applicable only to a Participating TO that has financed facilities for the local furnishing of electric energy with Local Furnishing Bonds. Notwithstanding any other provisions of this LGIP, the Participating TO and the CAISO shall not be required to provide Interconnection Service to the Interconnection Customer pursuant to this LGIP and the LGIA if the provision of such Interconnection Service would jeopardize the tax-exempt status of any Local Furnishing Bond(s) issued for the benefit of the Participating TO.

### 13.6.2 Alternative Procedures for Requesting Interconnection Service.

If a Participating TO determines that the provision of Interconnection Service requested by the Interconnection Customer would jeopardize the tax-exempt status of any Local Furnishing Bond(s) issued for the benefit of the Participating TO, it shall advise the Interconnection Customer and the CAISO within (30) calendar days of receipt of the Interconnection Request.

The Interconnection Customer thereafter may renew its request for the same interconnection Service by tendering an application under Section 211 of the Federal Power Act, in which case the Participating TO, within ten (10) calendar days of receiving a copy of the Section 211 application, will waive its rights to a request for service under Section 213(a) of the Federal Power Act and to the issuance of a proposed order under Section 212(c) of the Federal Power Act, and the CAISO and Participating TO shall provide the requested Interconnection Service pursuant to the terms and conditions set forth in this LGIP and the LGIA.

## 13.7<sup>886</sup> Change in CAISO Operational Control<sup>887</sup>

If the CAISO no longer has control of the portion of the CAISO Controlled Grid at the Point of Interconnection during the period when an Interconnection Request is pending, the CAISO shall transfer to<sup>888</sup> **the applicable former Participating TO or successor entity**<sup>889</sup> which has ownership of the Point of Interconnection any amount of the deposit or payment with interest thereon that exceeds the cost that it incurred to evaluate the request for interconnection. Any difference between such net deposit amount and the costs that the<sup>890</sup> **former Participating TO or successor entity**<sup>891</sup> incurs to evaluate the request for interconnection shall be paid by or refunded to the Interconnection Customer, as appropriate. The CAISO shall coordinate with the applicable<sup>892</sup> **former Participating TO or successor entity**<sup>893</sup> which has ownership of the Point of Interconnection to complete any Interconnection Study, as appropriate, that the CAISO has begun but has not completed. If the CAISO has tendered a draft LGIA to the Interconnection Customer but the Interconnection Customer has neither executed the LGIA<sup>894</sup> **nor**<sup>895</sup> requested the filing of an unexecuted LGIA with FERC, unless otherwise provided, the Interconnection Customer must complete negotiations with the applicable<sup>896</sup> **former Participating TO or successor entity**<sup>897</sup> which has the ownership of the Point of Interconnection.<sup>898</sup>

<sup>899</sup> **APPENDIX 1 to LGIP  
 INTERCONNECTION REQUEST**

Provide three copies of this completed form pursuant to Section 7 of this LGIP Appendix 1 below.

1. The undersigned Interconnection Customer submits this request to interconnect its Large Generating Facility with the CAISO Controlled Grid pursuant to the CAISO Tariff.
2. This Interconnection Request is for (check one):  
\_\_\_\_\_ A proposed new Large Generating Facility.  
\_\_\_\_\_ An increase in the generating capacity or a Material Modification of <sup>900</sup> to <sup>901</sup> an existing Generating Facility.

3. ~~\_\_\_\_\_ [NOT USED]~~<sup>902</sup>

**3. Requested Deliverability Status is for (check one):**<sup>903</sup>

<sup>904</sup> **Full Capacity**<sup>905</sup>

<sup>906</sup> **Energy Only**<sup>907</sup>

4. The Interconnection Customer provides the following information:

- a. Address or location, including the county, of the proposed new Large Generating Facility site or, in the case of an existing Generating Facility, the name and specific location, including the county, of the existing Generating Facility;

**Project Name:** <sup>908</sup> \_\_\_\_\_ <sup>909</sup> \_\_\_\_\_

**Project Location:** <sup>910</sup>

**Street Address:** <sup>911</sup> \_\_\_\_\_ <sup>912</sup> \_\_\_\_\_

**City, State:** <sup>913</sup> \_\_\_\_\_ <sup>914</sup> \_\_\_\_\_

**County:** <sup>915</sup> \_\_\_\_\_ <sup>916</sup> \_\_\_\_\_

**Zip Code:** <sup>917</sup> \_\_\_\_\_ <sup>918</sup> \_\_\_\_\_

- b. Maximum megawatt electrical output of the proposed new Large Generating Facility or the amount of megawatt increase in the generating capacity of an existing Generating Facility;

**Maximum megawatt electrical output (Net MW):** <sup>919</sup> \_\_\_\_\_ <sup>920</sup> or <sup>921</sup> \_\_\_\_\_

**Megawatt increase (Net MW):** <sup>922</sup> \_\_\_\_\_ <sup>923</sup> \_\_\_\_\_

- c. Type of project (i.e., gas turbine, hydro, wind, etc.) and general description of the equipment configuration;

<sup>924</sup> **Cogeneration** <sup>925</sup> <sup>926</sup> **Reciprocating Engine** <sup>927</sup>

<sup>928</sup> **Biomass** <sup>929</sup> <sup>930</sup> **Steam Turbine** <sup>931</sup>

<sup>932</sup> **Gas Turbine** <sup>933</sup> <sup>934</sup> **Wind** <sup>935</sup>

<sup>936</sup> **Hydro** <sup>937</sup> <sup>938</sup> **Photovoltaic** <sup>939</sup>

<sup>940</sup> **Combined Cycle** <sup>941</sup>

**Other (please describe):** <sup>942</sup> \_\_\_\_\_ <sup>943</sup> \_\_\_\_\_

**General description of the equipment configuration:** <sup>944</sup>

<sup>945</sup>  
\_\_\_\_\_

- d. Proposed In-Service Date, Trial Operation date and Commercial Operation Date by day, month, and year and term of service **(dates must be sequential)** <sup>946</sup>;

**Proposed In-Service Date:** \_\_\_\_\_ <sup>947</sup> \_\_\_\_\_ <sup>948</sup> / \_\_\_\_\_ <sup>949</sup> \_\_\_\_\_ <sup>950</sup> / \_\_\_\_\_ <sup>951</sup> \_\_\_\_\_ <sup>952</sup>  
**Proposed Trial Operation date:** \_\_\_\_\_ <sup>953</sup> \_\_\_\_\_ <sup>954</sup> / \_\_\_\_\_ <sup>955</sup> \_\_\_\_\_ <sup>956</sup> / \_\_\_\_\_ <sup>957</sup> \_\_\_\_\_ <sup>958</sup>  
**Proposed Commercial Operation Date:** \_\_\_\_\_ <sup>959</sup> \_\_\_\_\_ <sup>960</sup> / \_\_\_\_\_ <sup>961</sup> \_\_\_\_\_ <sup>962</sup> / \_\_\_\_\_ <sup>963</sup> \_\_\_\_\_ <sup>964</sup>  
**Proposed Term of Service (years):** \_\_\_\_\_ <sup>965</sup> \_\_\_\_\_ <sup>966</sup>

- e. Name, address, telephone number, and e-mail address of the Interconnection Customer's contact person;

**Name:** \_\_\_\_\_ <sup>967</sup> \_\_\_\_\_ <sup>968</sup>  
**Title:** \_\_\_\_\_ <sup>969</sup> \_\_\_\_\_ <sup>970</sup>  
**Company Name:** \_\_\_\_\_ <sup>971</sup> \_\_\_\_\_ <sup>972</sup>  
**Street Address:** \_\_\_\_\_ <sup>973</sup> \_\_\_\_\_ <sup>974</sup>  
**City, State:** \_\_\_\_\_ <sup>975</sup> \_\_\_\_\_ <sup>976</sup>  
**Zip Code:** \_\_\_\_\_ <sup>977</sup> \_\_\_\_\_ <sup>978</sup>  
**Phone Number:** \_\_\_\_\_ <sup>979</sup> \_\_\_\_\_ <sup>980</sup>  
**Fax Number:** \_\_\_\_\_ <sup>981</sup> \_\_\_\_\_ <sup>982</sup>  
**Email Address:** \_\_\_\_\_ <sup>983</sup> \_\_\_\_\_ <sup>984</sup>  
**Interconnection** <sup>985</sup>  
**Customer's** <sup>986</sup>  
**DUNS Number** \_\_\_\_\_ <sup>987</sup> \_\_\_\_\_ <sup>988</sup>

- f. Approximate location of the proposed Point of Interconnection **(i.e., specify interconnection point, voltage level, and the location of interconnection)** <sup>989</sup>; and

- g. Interconnection Customer data (set forth in Attachment A)

**The Interconnection Customer shall provide to the CAISO the** <sup>990</sup> **technical data called for in LGIP Appendix 1, Attachment A.** <sup>991</sup> **Three (3) copies are required.** <sup>992</sup>

5. Applicable deposit amount as specified in the LGIP-- <sup>993</sup> **made payable to California ISO. Send check to CAISO along with the:** <sup>994</sup>

**1.** <sup>995</sup> **Appendix 1 to LGIP (Interconnection Request) for processing.** <sup>996</sup>  
**2.** <sup>997</sup> **Attachment A to Appendix 1 (Interconnection Request Large Generating Facility Data).** <sup>998</sup>

6. Evidence of Site Control<sup>999</sup> **Exclusivity**<sup>1000</sup> as specified in the LGIP and name(s), address(es) and contact information of site owner(s) (check one):

Is attached to this Interconnection Request  
 Will<sup>1001</sup> **Deposit in lieu of Site Exclusivity attached, Site Exclusivity will**<sup>1002</sup> be provided at a later date in accordance with this LGIP

7. This Interconnection Request shall be submitted to the representative indicated below:

New Resource Interconnection  
California ISO  
P.O. Box 639014  
Folsom, CA 95763-9014

Overnight address: 151 Blue Ravine Road, Folsom, CA 95630

8. Representative of the Interconnection Customer to contact:

[To be completed by the Interconnection Customer]

**Name:** \_\_\_\_\_<sup>1003</sup> \_\_\_\_\_<sup>1004</sup>  
**Title:** \_\_\_\_\_<sup>1005</sup> \_\_\_\_\_<sup>1006</sup>  
**Company Name:** \_\_\_\_\_<sup>1007</sup> \_\_\_\_\_<sup>1008</sup>  
**Street Address:** \_\_\_\_\_<sup>1009</sup> \_\_\_\_\_<sup>1010</sup>  
**City, State:** \_\_\_\_\_<sup>1011</sup> \_\_\_\_\_<sup>1012</sup>  
**Zip Code:** \_\_\_\_\_<sup>1013</sup> \_\_\_\_\_<sup>1014</sup>  
**Phone Number:** \_\_\_\_\_<sup>1015</sup> \_\_\_\_\_<sup>1016</sup>  
**Fax Number:** \_\_\_\_\_<sup>1017</sup> \_\_\_\_\_<sup>1018</sup>  
**Email Address:** \_\_\_\_\_<sup>1019</sup> \_\_\_\_\_<sup>1020</sup>

9. This Interconnection Request is submitted by:

Name<sup>1021</sup> **Legal name**<sup>1022</sup> of the Interconnection Customer:

By (signature):

Name (type or print):

Title:

\_\_\_\_\_  
Date: \_\_\_\_\_<sup>1023</sup>

**Date:** \_\_\_\_\_<sup>1024</sup>

1025  
**Attachment A**  
**To LGIP Appendix 1**  
**Interconnection Request**

**LARGE GENERATING FACILITY DATA**

Provide three copies of this completed form pursuant to Section 7 of LGIP Appendix 1.

**1. Provide two original prints and one reproducible copy (no larger than 36" x 24") of the following:**

- A. Site drawing to scale, showing generator location and Point of Interconnection with the CAISO Controlled Grid.
- B. Single-line diagram showing applicable equipment such as generating units, step-up transformers, auxiliary transformers, switches/disconnects of the proposed interconnection, including the required protection devices and circuit breakers. For wind generator farms, the one line diagram should include the distribution lines connecting the various groups of generating units, the generator capacitor banks, the step up transformers, the distribution lines, and the substation transformers and capacitor banks at the Point of Interconnection with the CAISO Controlled Grid.

**2. Generating Facility Information**

(kW):

A) <sup>1026 1027</sup> \_\_\_\_\_ Total Generating Facility rated output

B) <sup>1028 1029</sup> \_\_\_\_\_ Generating Facility auxiliary Load

C) <sup>1030 1031</sup> \_\_\_\_\_ (kW):  
 Project net capacity (kW):

D) <sup>1032 1033</sup> \_\_\_\_\_ Standby Load when Generating

E) <sup>1034 1035</sup> \_\_\_\_\_ Facility is off-line (kW):  
 Number of Generating Units: \_\_\_\_\_  
 (Please repeat the following items for each generator)

F) <sup>1036 1037</sup> \_\_\_\_\_ Individual generator rated output (kW)  
 for each unit): \_\_\_\_\_

G) <sup>1038 1039</sup> \_\_\_\_\_ Manufacturer: \_\_\_\_\_

H) <sup>1040 1041</sup> \_\_\_\_\_ Year Manufactured: \_\_\_\_\_

I) <sup>1042 1043</sup> \_\_\_\_\_ Nominal Terminal Voltage: \_\_\_\_\_

J) <sup>1044 1045</sup> \_\_\_\_\_ Rated Power Factor (%): \_\_\_\_\_

K) <sup>1046 1047</sup> \_\_\_\_\_ Type (Induction, Synchronous, D.C. with Inverter): \_\_\_\_\_

L) <sup>1048 1049</sup> \_\_\_\_\_ Phase (3 phase or single phase): \_\_\_\_\_

M) <sup>1050 1051</sup> \_\_\_\_\_ Connection (Delta, Grounded WYE, Ungrounded WYE, impedance  
 grounded): \_\_\_\_\_

N) <sup>1052 1053</sup> \_\_\_\_\_ Generator Voltage Regulation Range: \_\_\_\_\_

O) <sup>1054 1055</sup> \_\_\_\_\_ Generator Power Factor Regulation Range: \_\_\_\_\_

P) <sup>1056 1057</sup> \_\_\_\_\_ For combined cycle plants, specify the plant output for an outage of the steam  
 turbine or an outage of a single combustion turbine:

**3. Synchronous Generator – General Information:**

(Please repeat the following for each generator)

- A. Rated Generator speed (rpm): \_\_\_\_\_
- B. <sup>1058</sup> ~~B.~~ <sup>1059</sup> Rated MVA: \_\_\_\_\_

- C. <sup>1060</sup> C. <sup>1061</sup> Rated Generator Power Factor: \_\_\_\_\_
- D. Generator Efficiency at Rated Load (%): \_\_\_\_\_
- E. Moment of Inertia (including prime mover): \_\_\_\_\_
- F. Inertia Time Constant (on machine base) H: \_\_\_\_\_ sec or MJ/MVA
- G. SCR (Short-Circuit Ratio - the ratio of the field current required for rated open-circuit voltage to the field current required for rated short-circuit current): \_\_\_\_\_
- H. Please attach generator reactive capability curves.
- I. Rated Hydrogen Cooling Pressure in psig (Steam Units only): \_\_\_\_\_
- J. Please attach a plot of generator terminal voltage versus field current that shows the air gap line, the open-circuit saturation curve, and the saturation curve at full load and rated power factor.

**4. Excitation System Information**

(Please repeat the following for each generator)

- A. Indicate the Manufacturer \_\_\_\_\_ and Type \_\_\_\_\_ of excitation system used for the generator. For exciter type, please choose from 1 to 8 below or describe the specific excitation system.
  - 1) <sup>1062</sup> (1) <sup>1063</sup> Rotating DC commutator exciter with continuously acting regulator. The regulator power source is independent of the generator terminal voltage and current.
  - 2) <sup>1064</sup> (2) <sup>1065</sup> Rotating DC commutator exciter with continuously acting regulator. The regulator power source is bus fed from the generator terminal voltage.
  - 3) <sup>1066</sup> (3) <sup>1067</sup> Rotating DC commutator exciter with non-continuously acting regulator (i.e., regulator adjustments are made in discrete increments).
  - 4) <sup>1068</sup> (4) <sup>1069</sup> Rotating AC Alternator Exciter with non-controlled (diode) rectifiers. The regulator power source is independent of the generator terminal voltage and current (not bus-fed).
  - 5) <sup>1070</sup> (5) <sup>1071</sup> Rotating AC Alternator Exciter with controlled (thyristor) rectifiers. The regulator power source is fed from the exciter output voltage.
  - 6) <sup>1072</sup> (6) <sup>1073</sup> Rotating AC Alternator Exciter with controlled (thyristor) rectifiers.
  - 7) <sup>1074</sup> (7) <sup>1075</sup> Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from the generator terminal voltage.
  - 8) <sup>1076</sup> (8) <sup>1077</sup> Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from a combination of generator terminal voltage and current (compound-source controlled rectifiers system).
- B. Attach a copy of the block diagram of the excitation system from its instruction manual. The diagram should show the input, output, and all feedback loops of the excitation system.
- C. Excitation system response ratio (ASA): \_\_\_\_\_
- D. Full load rated exciter output voltage: \_\_\_\_\_
- E. Maximum exciter output voltage (ceiling voltage): \_\_\_\_\_
- F. Other comments regarding the excitation system?

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**5. Power System Stabilizer Information.**

(Please repeat the following for each generator. All new generators are required to install PSS unless an exemption has been obtained from WECC. Such an exemption can be obtained for units that do not have suitable excitation systems.)

- A. Manufacturer: \_\_\_\_\_

- B. Is the PSS digital or analog? \_\_\_\_\_
- C. Note the input signal source for the PSS?  
 \_\_\_\_\_ Bus frequency \_\_\_\_\_ Shaft speed \_\_\_\_\_ Bus Voltage  
 \_\_\_\_\_ Other (specify source)
- D. Please attach a copy of a block diagram of the PSS from the PSS Instruction Manual and the correspondence between dial settings and the time constants or PSS gain.
- E. Other comments regarding the PSS?  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**6. Turbine-Governor Information**

(Please repeat the following for each generator)

Please complete Part A for steam, gas or combined-cycle turbines, Part B for hydro turbines, and Part C for both.

A. Steam, gas or combined-cycle turbines:

1. <sup>1079</sup>(1)<sup>1080</sup> List type of unit (Steam, Gas, or Combined-cycle): \_\_\_\_\_
2. <sup>1081</sup>(2)<sup>1082</sup> If steam or combined-cycle, does the turbine system have a reheat process (i.e., both high and low pressure turbines)? \_\_\_\_\_
3. <sup>1083</sup>(3)<sup>1084</sup> If steam with reheat process, or if combined-cycle, indicate in the space provided, the percent of full load power produced by each turbine:  
 Low pressure turbine or gas turbine: \_\_\_\_\_%  
 High pressure turbine or steam turbine: \_\_\_\_\_%

B. Hydro turbines:

1. <sup>1085</sup>(1)<sup>1086</sup> Turbine efficiency at rated load: \_\_\_\_\_%
2. <sup>1087</sup>(2)<sup>1088</sup> Length of penstock: \_\_\_\_\_ ft
3. <sup>1089</sup>(3)<sup>1090</sup> Average cross-sectional area of the penstock: \_\_\_\_\_ ft<sup>2</sup>
4. <sup>1091</sup>(4)<sup>1092</sup> Typical maximum head (vertical distance from the bottom of the penstock, at the gate, to the water level): \_\_\_\_\_ ft
5. <sup>1093</sup>(5)<sup>1094</sup> Is the water supply run-of-the-river or reservoir: \_\_\_\_\_
6. <sup>1095</sup>(6)<sup>1096</sup> Water flow rate at the typical maximum head: \_\_\_\_\_ ft<sup>3</sup>/sec
7. <sup>1097</sup>(7)<sup>1098</sup> Average energy rate: \_\_\_\_\_ kW-hrs/acre-ft
8. <sup>1099</sup>(8)<sup>1100</sup> Estimated yearly energy production: \_\_\_\_\_ kW-hrs

C. Complete this section for each machine, independent of the turbine type.

1. <sup>1101</sup>(1)<sup>1102</sup> Turbine manufacturer: \_\_\_\_\_
2. <sup>1103</sup>(2)<sup>1104</sup> Maximum turbine power output: \_\_\_\_\_ MW
3. <sup>1105</sup>(3)<sup>1106</sup> Minimum turbine power output (while on line): \_\_\_\_\_ MW
4. <sup>1107</sup>(4)<sup>1108</sup> Governor information:  
 ( <sup>1109</sup>a: <sup>1110</sup> )<sup>1111</sup> Droop setting (speed regulation): \_\_\_\_\_  
 ( <sup>1112</sup>b: <sup>1113</sup> )<sup>1114</sup> Is the governor mechanical-hydraulic or electro-hydraulic (Electro-hydraulic governors have an electronic speed sensor and transducer.)? \_\_\_\_\_  
 ( <sup>1115</sup>c: <sup>1116</sup> )<sup>1117</sup> Other comments regarding the turbine governor system?  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



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**7. Synchronous Generator and Associated Equipment – Dynamic Models:**

For each generator, governor, exciter and power system stabilizer, select the appropriate dynamic model from the General Electric PSLF Program Manual and provide the required input data. The manual is available on the GE website at [www.gepower.com](http://www.gepower.com). Select the following links within the website: 1) Our Businesses, 2) GE Power Systems, 3) Energy Consulting, 4) GE PSLF Software, 5) GE PSLF User's Manual.

There are links within the GE PSLF User's Manual to detailed descriptions of specific models, a definition of each parameter, a list of the output channels, explanatory notes, and a control system block diagram. The block diagrams are also available on the CAISO Website.

If you require assistance in developing the models, we suggest you contact General Electric. Accurate models are important to obtain accurate study results. Costs associated with any changes in facility requirements that are due to differences between model data provided by the generation developer and the actual generator test data, may be the responsibility of the generation developer.

**8. Induction Generator Data:**

- A. Rated Generator Power Factor at rated load: \_\_\_\_\_
- B. Moment of Inertia (including prime mover): \_\_\_\_\_
- C. Do you wish reclose blocking? Yes \_\_\_\_, No \_\_\_\_  
Note: Sufficient capacitance may be on the line now, or in the future, and the generator may self-excite unexpectedly.

**9. Generator Short Circuit Data**

For each generator, provide the following reactances expressed in p.u. on the generator base:

- $X''1$  – positive sequence subtransient reactance: \_\_\_\_\_
- $X''2$  – negative sequence subtransient reactance: \_\_\_\_\_
- $X''0$  – zero sequence subtransient reactance: \_\_\_\_\_

Generator Grounding:

- A. \_\_\_\_\_ Solidly grounded
- B. \_\_\_\_\_ Grounded through an impedance  
Impedance value in p.u. on generator base. R: \_\_\_\_\_ p.u.  
X: \_\_\_\_\_ p.u.
- C. \_\_\_\_\_ Ungrounded

**10. Step-Up Transformer Data**

For each step-up transformer, fill out the data form provided in Table 1.

**11. Line Data**

There is no need to provide data for new lines that are to be planned by the Participating TO. However, for transmission lines that are to be planned by the generation developer, please provide the following information:

Nominal Voltage: \_\_\_\_\_  
Line Length (miles): \_\_\_\_\_  
Line termination Points: \_\_\_\_\_

Conductor Type: \_\_\_\_\_ Size: \_\_\_\_\_  
 If bundled. Number per phase: \_\_\_\_\_, Bundle spacing: \_\_\_\_\_ in.  
 Phase Configuration. Vertical: \_\_\_\_\_, Horizontal: \_\_\_\_\_  
 Phase Spacing (ft): A-B: \_\_\_\_\_, B-C: \_\_\_\_\_, C-A: \_\_\_\_\_  
 Distance of lowest conductor to Ground: \_\_\_\_\_ ft  
 Ground Wire Type: \_\_\_\_\_ Size: \_\_\_\_\_ Distance to Ground: \_\_\_\_\_ ft  
 Attach Tower Configuration Diagram  
 Summer line ratings in amperes (normal and emergency) \_\_\_\_\_  
 Resistance ( R ): \_\_\_\_\_ p.u.\*\*  
 Reactance: ( X ): \_\_\_\_\_ p.u.\*\*  
 Line Charging (B/2): \_\_\_\_\_ p.u.\*\*  
 \*\* On 100-MVA and nominal line voltage (kV) Base

**12. Wind Generators**

Number of generators to be interconnected pursuant to this Interconnection Request: \_\_\_\_\_

Elevation: \_\_\_\_\_ \_\_\_\_\_ Single Phase \_\_\_\_\_ Three Phase

Inverter manufacturer, model name, number, and version:

\_\_\_\_\_

List of adjustable setpoints for the protective equipment or software:

\_\_\_\_\_

Field Volts: \_\_\_\_\_  
 Field Amperes: \_\_\_\_\_  
 Motoring Power (kW): \_\_\_\_\_  
 Neutral Grounding Resistor (If Applicable): \_\_\_\_\_  
 $I_2^2t$  or K (Heating Time Constant): \_\_\_\_\_  
 Rotor Resistance: \_\_\_\_\_  
 Stator Resistance: \_\_\_\_\_  
 Stator Reactance: \_\_\_\_\_  
 Rotor Reactance: \_\_\_\_\_  
 Magnetizing Reactance: \_\_\_\_\_  
 Short Circuit Reactance: \_\_\_\_\_  
 Exciting Current: \_\_\_\_\_  
 Temperature Rise: \_\_\_\_\_  
 Frame Size: \_\_\_\_\_  
 Design Letter: \_\_\_\_\_  
 Reactive Power Required In Vars (No Load): \_\_\_\_\_  
 Reactive Power Required In Vars (Full Load): \_\_\_\_\_  
 Total Rotating Inertia, H: \_\_\_\_\_ Per Unit on KVA Base

Note: A completed General Electric Company Power Systems Load Flow (PSLF) data sheet must be supplied with the Interconnection Request. If other data sheets are more appropriate to the proposed device then they shall be provided and discussed at Scoping Meeting.

TABLE 1  
TRANSFORMER DATA

|  |                              |             |                |
|--|------------------------------|-------------|----------------|
|  | UNIT _____                   |             |                |
|  | NUMBER OF TRANSFORMERS _____ | PHASE _____ |                |
| RATED KVA  | H Winding                    | X Winding   | Y Winding      |
| Connection<br>(Delta, Wye, Gnd.)                                 | _____                        | _____       | _____          |
| 55 C Rise  | _____                        | _____       | _____          |
| 65 C Rise  | _____                        | _____       | _____          |
| RATED VOLTAGE  | _____                        | _____       | _____          |
| BIL  | _____                        | _____       | _____          |
| AVAILABLE TAPS<br>(planned or existing)                          | _____                        | _____       | _____          |
| LOAD TAP CHANGER?  | _____                        | _____       | _____          |
| TAP SETTINGS   | _____                        | _____       | _____          |
| COOLING TYPE :   | OA _____                     | OA/FA _____ | OA/FA/FA _____ |
|  |                              |             | OA/FOA _____   |
| IMPEDANCE  | H-X                          | H-Y         | X-Y            |
| Percent  | _____                        | _____       | _____          |
| MVA Base   | _____                        | _____       | _____          |
| Tested Taps  | _____                        | _____       | _____          |
| WINDING RESISTANCE   | H                            | X           | Y              |
| Ohms   | _____                        | _____       | _____          |
| CURRENT TRANSFORMER RATIOS                                       |                              |             |                |
| H _____  | X _____                      | Y _____     | N _____        |
| PERCENT EXCITING CURRENT 100 % Voltage; _____ 110% Voltage _____ |                              |             |                |

Supply copy of nameplate and manufacture's test report when available

## Appendix 2 to LGIP<sup>1118</sup>

LGIP APPENDIX 2 — INTERCONNECTION PROCEDURES FOR A WIND GENERATING PLANT<sup>1119</sup>

### APPENDIX 2 to LGIP<sup>1120</sup> INTERCONNECTION PROCEDURES FOR A WIND GENERATING PLANT<sup>1121</sup>

LGIP Appendix 2 sets forth procedures specific to a wind generating plant. All other requirements of this LGIP continue to apply to wind generating plant interconnections.<sup>1122</sup>

#### A. Special Procedures Applicable to Wind Generators<sup>1123</sup>

The wind plant Interconnection Customer, in completing the Interconnection Request required by Section 3.1 of this LGIP, may provide to the CAISO a set of preliminary electrical design specifications depicting the wind plant as a single equivalent generator. Upon satisfying these and other applicable Interconnection Request conditions, the wind plant may enter the queue and receive the Base Case data as provided for in this LGIP.<sup>1124</sup>

No later than six (6) months after submitting an Interconnection Request completed in this manner, the wind plant Interconnection Customer must submit completed detailed electrical design specifications and other data (including collector system layout data) needed to allow the CAISO to complete the Interconnection Study.<sup>1125</sup>

### INTERCONNECTION FEASIBILITY STUDY AGREEMENT<sup>1126</sup>

**THIS AGREEMENT** is made and entered into this \_\_\_ day of \_\_\_\_\_, 20\_\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_, ("Interconnection Customer") and the California Independent System Operator Corporation, a California nonprofit public benefit corporation existing under the laws of the State of California, ("CAISO"). The Interconnection Customer and the CAISO each may be referred to as a "Party," or collectively as the "Parties."<sup>1127</sup>

#### Large Generator Interconnection Procedures (LGIP)<sup>1128</sup> Relating to the Transition Cluster<sup>1129</sup>

#### RECITALS<sup>1130</sup>

##### Section 1. Objective, Applicability and Definitions.<sup>1131</sup>

**WHEREAS**, the Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_; and<sup>1132</sup>

##### 1.1 Objective and Applicability.<sup>1133</sup>

**WHEREAS**, the Interconnection Customer desires to interconnect the Large Generating Facility with the CAISO Controlled Grid; and<sup>1134</sup>

**The objective of this Appendix 2 to the Large Generator Interconnection Procedures (LGIP) is to implement the requirements for interconnecting to the CAISO Controlled Grid those Generating Facilities assigned to the Transition Cluster. All Interconnection Requests assigned to the Transition Cluster shall be**

**deemed to have been assigned to a Queue Cluster Window for purposes of LGIP Section 1.1 and therefore all provisions of the LGIP apply to Generating Facilities included in the Transition Cluster, except as set forth herein.**<sup>1135</sup>

**WHEREAS**, the Interconnection Customer has requested the CAISO to conduct or cause to be performed an Interconnection Feasibility Study to assess the feasibility of interconnecting the proposed Large Generating Facility.<sup>1136</sup>

## **1.2 Definitions.**<sup>1137</sup>

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:<sup>1138</sup>

### **1.2.1 Master Definitions Supplement and Other General Definition Rules.**<sup>1139</sup>

1.0 — When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the CAISO's FERC-approved Standard Large Generation Interconnection Procedures ("LGIP") or the Master Definitions Supplement, Appendix A to the CAISO Tariff, as applicable.<sup>1140</sup>

2.0 — The Interconnection Customer elects and the CAISO shall conduct or cause to be performed an Interconnection Feasibility Study consistent with the LGIP in accordance with the CAISO Tariff.<sup>1141</sup> **Unless the context otherwise requires, any word or expression defined in the Master Definitions Supplement, Appendix A to the CAISO Tariff, shall have the same meaning where used in this Appendix 2 to the LGIP. Further, unless the context otherwise requires, any word or expression defined in LGIP Section 1.2 shall have the same meaning where used in this Appendix 2 to the LGIP. References to LGIP in this Appendix 2 are to Appendix Y of the CAISO Tariff.**<sup>1142</sup>

3.0 — The scope of the Interconnection Feasibility Study shall be subject to the assumptions set forth in Attachment A to this Agreement.<sup>1143</sup>

4.0 — The Interconnection Feasibility Study shall be based on the technical information provided by the Interconnection Customer in the Interconnection Request, as may be modified as the result of the Scoping Meeting. The CAISO reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Feasibility Study and as designated in accordance with Section 3.5.4 of the LGIP. If, after the designation of the Point of Interconnection pursuant to Section 3.5.4 of the LGIP, the Interconnection Customer modifies its Interconnection Request pursuant to Section 4.4 of the LGIP, the time to complete the Interconnection Feasibility Study may be extended.<sup>1144</sup>

5.0 — The Interconnection Feasibility Study report shall provide the following information:<sup>1145</sup>

— preliminary identification of any circuit breaker short circuit capability limits exceeded on the Participating TO's electric system or the CAISO Controlled Grid as a result of the interconnection;<sup>1146</sup>

— preliminary identification of any thermal overload or voltage limit violations on the Participating TO's electric system or the CAISO Controlled Grid resulting from the interconnection;<sup>1147</sup>

~~\_\_\_\_\_ preliminary description and non-binding good faith estimate of cost and cost responsibility for and time for construction of the Participating TO's facilities required to interconnect the Large Generating Facility to the Participating TO's electric system or the CAISO Controlled Grid and to address the identified short circuit and power flow issues;~~<sup>1148</sup>

~~\_\_\_\_\_ preliminary identification of financial impacts, if any, on Local Furnishing Bonds; and~~<sup>1149</sup>

~~\_\_\_\_\_ expected results in the Interconnection System Impact Study.~~<sup>1150</sup>

~~6.0 In addition to the deposit(s) paid by the Interconnection Customer pursuant to Section 3.5.1 of the LGIP, the Interconnection Customer shall provide a deposit of \$10,000 for the performance of the Interconnection Feasibility Study.~~<sup>1151</sup>

~~Following the issuance of the Interconnection Feasibility Study to the Interconnection Customer the CAISO shall charge and the Interconnection Customer shall pay the actual costs of the Interconnection Feasibility Study, inclusive of any re-studies and amendments to the Interconnection Feasibility Study, pursuant to Section 9 of this Agreement.~~<sup>1152</sup>

~~Any difference between the deposits made toward the Interconnection Feasibility Study, amendments and re-studies to the Interconnection Feasibility Study, and the actual cost of the study shall be paid by or refunded to the Interconnection Customer, as appropriate in accordance with Section 13.3 of the LGIP.~~<sup>1153</sup>

~~7.0 Pursuant to Section 3.7 of the LGIP, the CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems. The CAISO may provide a copy of the Interconnection Feasibility Study results to an Affected System Operator and the Western Electricity Coordinating Council. Requests for review and input from Affected System Operators or the Western Electricity Coordinating Council may arrive at any time prior to interconnection, and a revision of the Interconnection Feasibility Study or re-study may be required in such event.~~<sup>1154</sup>

~~8.0 Substantial portions of technical data and assumptions used to perform the Interconnection Feasibility Study, such as system conditions, existing and planned generation, and unit modeling, may change after the CAISO provides the Interconnection Feasibility Study results to the Interconnection Customer.~~<sup>1155</sup>

~~\_\_\_\_\_ Study results will reflect available data at the time the CAISO provides the Interconnection Feasibility Study to the Interconnection Customer. The CAISO shall not be responsible for any additional costs, including, without limitation, costs of new or additional facilities, system upgrades, or schedule changes, that may be incurred by the Interconnection Customer as a result of changes in such data and assumptions.~~<sup>1156</sup>

~~9.0 In the event that a re-study or amendment of the Interconnection Feasibility Study is required, the CAISO shall provide notification of the need for such re-study or amendment, and the Interconnection Customer shall provide direction as to whether to proceed with the re-study or amendment and any associated deposit payment pursuant to Section 6.4 or Section 12.2.4 of the LGIP, as applicable.~~<sup>1157</sup><sup>1158</sup>

- ~~10.0 — The CAISO shall maintain records and accounts of all costs incurred in performing the Interconnection Feasibility Study, inclusive of any re-studies or amendments thereto, in sufficient detail to allow verification of all costs incurred, including associated overheads. The Interconnection Customer shall have the right, upon reasonable notice, within a reasonable time following receipt of the final cost report associated with this Interconnection Feasibility Study at the CAISO's offices and at its own expense, to audit the CAISO's records as necessary and as appropriate in order to verify costs incurred by the CAISO. Any audit requested by the Interconnection Customer shall be completed, and written notice of any audit dispute provided to the CAISO, within one hundred eighty (180) calendar days following receipt by the Interconnection Customer of the CAISO's notification of the final costs of the Interconnection Feasibility Study, inclusive of any re-study or amendment thereto.~~<sup>1159</sup>
- ~~11.0 — In accordance with Section 3.8 of the LGIP, the Interconnection Customer may withdraw its Interconnection Request at any time by written notice to the CAISO. Upon receipt of such notice, this Agreement shall terminate.~~<sup>1160</sup>
- ~~12.0 — Pursuant to Section 6.1 of the LGIP, this Agreement shall become effective upon the date the fully executed Agreement and deposit specified in Section 6 of this Agreement are received by the CAISO. If the CAISO does not receive the fully executed Agreement and payment pursuant to Section 6.1 of the LGIP, then the Interconnection Request will be deemed withdrawn upon the Interconnection Customer's receipt of written notice by the CAISO pursuant to Section 3.8 of the LGIP.~~<sup>1161</sup>
- ~~13.0 — Miscellaneous.~~<sup>1162</sup>
- ~~13.1 — Dispute Resolution. Any dispute, or assertion of a claim, arising out of or in connection with this Interconnection Feasibility Study Agreement, shall be resolved in accordance with Section 13.5 of the LGIP.~~<sup>1163</sup>
- ~~13.2 — Confidentiality. Confidential Information shall be treated in accordance with Section 13.1 of the LGIP.~~<sup>1164</sup>
- ~~13.3 — Binding Effect. This Interconnection Feasibility Study Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.~~<sup>1165</sup>
- ~~13.4 — Conflicts. In the event of a conflict between the body of this Interconnection Feasibility Study Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Interconnection Feasibility Study Agreement shall prevail and be deemed the final intent of the Parties.~~<sup>1166</sup>
- ~~13.5 — Rules of Interpretation. This Interconnection Feasibility Study Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Interconnection Feasibility Study Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Interconnection Feasibility Study Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in~~

accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article or Section of this Interconnection Feasibility Study Agreement or such Appendix to this Interconnection Feasibility Study Agreement, or such Section to the LGIP or such Appendix to the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Interconnection Feasibility Study Agreement as a whole and not to any particular Article; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".<sup>1167</sup>

~~13.6 — Entire Agreement. This Interconnection Feasibility Study Agreement, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Interconnection Feasibility Study Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Interconnection Feasibility Study Agreement.~~<sup>1168</sup>

~~13.7 — No Third Party Beneficiaries. This Interconnection Feasibility Study Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.~~<sup>1169</sup>

## **1.2.2 Special Definitions for this LGIP Appendix 2.**<sup>1170</sup>

~~13.8 — Waiver. The failure of a Party to this Interconnection Feasibility Study Agreement to insist, on any occasion, upon strict performance of any provision of this Interconnection Feasibility Study Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.~~<sup>1171</sup>

**In this Appendix 2 to the LGIP, the following words and expressions shall have the meanings set opposite them:**<sup>1172</sup>

Any waiver at any time by either Party of its rights with respect to this Interconnection Feasibility Study Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Interconnection Feasibility Study Agreement. Termination or default of this Interconnection Feasibility Study Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO or CAISO. Any waiver of this Interconnection Feasibility Study Agreement shall, if requested, be provided in writing.<sup>1173</sup>

**"Serial Study Group" shall mean the collection of valid Interconnection Requests with an assigned Queue Position on or before June 1, 2008 studied in accordance with the interconnection procedures set forth in the version of the LGIP set forth in**



**CAISO Tariff Appendix U as permitted by the decision of FERC in Docket No. ER08-960-000.**<sup>1174</sup>

Any waivers at any time by any Party of its rights with respect to any default under this Interconnection Feasibility Study Agreement, or with respect to any other matter arising in connection with this Interconnection Feasibility Study Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Interconnection Feasibility Study Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Interconnection Feasibility Study Agreement shall not constitute or be deemed a waiver of such right.<sup>1175</sup>

**“Transition Cluster” shall mean the collection of valid Interconnection Requests with an assigned Queue Position on or before June 1, 2008 that were not included as part of the Serial Study Group by the decision of FERC in Docket No. ER08-960-000.**<sup>1176</sup>

13.9 Headings. The descriptive headings of the various Articles and Sections of this Interconnection Feasibility Study Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Interconnection Feasibility Study Agreement.<sup>1177</sup>

**“Transition Cluster Interconnection Study Deposit” shall mean, for each Interconnection Request in the Transition Cluster other than those subject to Section 3.2 of this Appendix 2 to the LGIP, the difference between (i) \$250,000 and (ii) the total amount the Interconnection Customer has been charged for Interconnection Studies performed under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement plus the balance of any remaining deposit provided under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement. For an Interconnection Request subject to Section 3.2 of this Appendix 2 to the LGIP, the amount of the Transition Cluster Interconnection Study Deposit shall be the difference between (i) \$100,000 and (ii) the total amount the Interconnection Customer has been charged for Interconnection Studies performed under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement plus the balance of any remaining deposit provided under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement.**<sup>1178</sup>

13.10 Multiple Counterparts. This Interconnection Feasibility Study Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.<sup>1179</sup>

**2. Queue Position.**<sup>1180</sup>

13.11 Amendment. The Parties may by mutual agreement amend this Interconnection Feasibility Study Agreement by a written instrument duly executed by both of the Parties.<sup>1181</sup>

**The Queue Position of any Interconnection Request included in the Transition Cluster shall be deemed to be lower than that of any Interconnection Request included in the Serial Study Group for purposes of performing Interconnection Studies for Large Generating Facilities whose Interconnection Requests are in the Serial Study Group.**<sup>1182</sup>

### 3. Requirements to Remain in the Transition Cluster.<sup>1183</sup>

13.12 ~~Modification by the Parties. The Parties may by mutual agreement amend the Appendices to this Interconnection Feasibility Study Agreement by a written instrument duly executed by both of the Parties. Such amendment shall become effective and a part of this Interconnection Feasibility Study Agreement upon satisfaction of all applicable laws and regulations.~~<sup>1184</sup>

#### <sup>1185</sup>3.1 General Requirements for Large Generating Facilities.<sup>1186</sup>

13.13 ~~Reservation of Rights. The CAISO shall have the right to make a unilateral filing with FERC to modify this Interconnection Feasibility Study Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Interconnection Feasibility Study Agreement pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Interconnection Feasibility Study Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.~~<sup>1187</sup>

**An Interconnection Request deemed to be included in the Transition Cluster in accordance with the decision of FERC in Docket No. ER08-960-000 will be deemed to have been withdrawn from the Transition Cluster unless the Interconnection Customer provides, within sixty (60) calendar days from the effective date of this Appendix 2 to the LGIP, all of the following: (i) a Transition Cluster Interconnection Study Deposit, (ii) a statement of the requested deliverability status, (iii) a preferred Point of Interconnection and voltage level and all other technical data required by the LGIP, if not already submitted to the CAISO, and (iv) demonstration of Site Exclusivity or a posting of a Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity must be, at a minimum, through the anticipated Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility.**<sup>1188</sup>

13.14 ~~No Partnership. This Interconnection Feasibility Study Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.~~<sup>1189</sup>

**Section 3.8 of the LGIP shall not apply to a failure to satisfy the requirements of this Section 3.1 of this Appendix 2 to the LGIP.**<sup>1190</sup>

13.15 ~~Assignment. This Interconnection Feasibility Study Agreement may be assigned by a Party only with the written consent of the other Party; provided that a Party may assign this Interconnection Feasibility Study Agreement without the consent of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Interconnection Feasibility Study Agreement; and provided further that the Interconnection Customer shall have~~

the right to assign this Interconnection Feasibility Study Agreement, without the consent of the other Party, for collateral security purposes to aid in providing financing for the Large Generating Unit, provided that the Interconnection Customer will require any secured party, trustee or mortgagee to notify the other Party of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the other Party of the date and particulars of any such exercise of assignment right(s). Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Interconnection Feasibility Study Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.<sup>1191</sup>

**3.2 Special Requirements for Certain Small and Existing Large Generating Facilities.**<sup>1192</sup>

**An Interconnection Customer with an Interconnection Request in the Transition Cluster relating to (a) a Small Generating Facility seeking a Deliverability Assessment or (b) a Generating Facility, subject to the LGIP in accordance with CAISO Tariff Section 25.1.1, that has achieved Commercial Operation prior to the date of the Interconnection Request, and is seeking to increase the capacity of the Generating Facility by less than 20 MW, will be deemed to have withdrawn its Interconnection Request from the Transition Cluster unless it provides, within sixty (60) calendar days from the effective date of this Appendix 2 to the LGIP, all of the following: (i) a Transition Cluster Interconnection Study Deposit, (ii) a statement of the requested deliverability status, (iii) a preferred Point of Interconnection and voltage level and all other technical data required by the LGIP, if not already submitted to the CAISO, and (iv) demonstration of Site Exclusivity or a posting of a Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity, at a minimum, must be through the Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility.**<sup>1193</sup>

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.<sup>1194</sup>

**Section 3.8 of the LGIP shall not apply to a failure to satisfy the requirements of this Section 3.2 of this Appendix 2 to the LGIP.**<sup>1195</sup>

**3.3 Communication of Transition Cluster Interconnection Study Deposit Amount.**<sup>1196</sup>

**California Independent System Operator Corporation**<sup>1197</sup>

**The CAISO shall provide each Interconnection Customer with the amount of its Transition Cluster Interconnection Study Deposit within five (5) Business Days after the effective date of this Appendix 2 to the LGIP.**<sup>1198</sup>

By: \_\_\_\_\_<sup>1199</sup>

**3.4 Use of the Transition Cluster Interconnection Study Deposit.**<sup>1200</sup>

Title: \_\_\_\_\_<sup>1201</sup>

**The CAISO shall deposit all Transition Cluster Interconnection Study Deposits in an interest bearing account at a bank or financial institution designated by the CAISO. The Transition Cluster Interconnection Study Deposit shall be applied to**

**pay for prudent costs incurred by the CAISO, the Participating TOs, or third parties at the direction of the CAISO or Participating TOs, as applicable, to perform and administer the Interconnection Studies. The Transition Cluster Interconnection Study Deposit is not refundable.**<sup>1202</sup>

Date: \_\_\_\_\_<sup>1203</sup>

**Upon execution of an LGIA by an Interconnection Customer, the CAISO and the applicable Participating TO(s), or the approval by FERC of an unexecuted LGIA, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Transition Cluster Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceed the costs the CAISO, Participating TOs, or third parties have incurred on the Interconnection Customer's behalf.**<sup>1204</sup>

[Insert name of the Interconnection Customer]<sup>1205</sup>

**Notwithstanding the foregoing, an Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request during an Interconnection Study Cycle shall be obligated to pay to the CAISO all costs in excess of the Transition Cluster Interconnection Study Deposit that have been prudently incurred or irrevocably have been committed to be incurred with respect to that Interconnection Request prior to withdrawal. The CAISO will reimburse the applicable Participating TO(s) or third parties, as applicable, for all work performed associated with the Interconnection Request at the CAISO's direction. The Interconnection Customer must pay all monies due before it is allowed to obtain any Interconnection Study data or results.**<sup>1206</sup>

By: \_\_\_\_\_<sup>1207</sup>

**All non-refundable portions of the Transition Cluster Interconnection Study Deposit that exceed the costs the CAISO, Participating TOs, or third parties have incurred on the Interconnection Customer's behalf shall be treated in accordance with CAISO Tariff Section 37.9.4.**<sup>1208</sup>

Title: \_\_\_\_\_<sup>1209</sup>

**3.5**<sup>1210</sup> **Obligation for Study Costs.**<sup>1211</sup>

Date: \_\_\_\_\_<sup>1212</sup>

The CAISO shall charge and the Interconnection Customer shall pay the actual costs of the Interconnection Studies.<sup>1213</sup> **The CAISO shall issue invoices for Interconnection Studies that shall include a detailed and itemized accounting of the cost of each Interconnection Study. The CAISO shall draw from the Transition Cluster Interconnection Study Deposit any undisputed costs within thirty (30) calendar days after issuance of an invoice therefor. Whenever the actual cost of performing the Interconnection Studies exceeds the Transition Cluster Interconnection Study Deposit, the Interconnection Customer shall pay the undisputed difference in accordance with the CAISO issued invoice within thirty (30) calendar days.**<sup>1214</sup> The CAISO shall not be obligated to continue to have any studies conducted unless the Interconnection Customer has paid all undisputed amounts in compliance herewith. In the event an Interconnection Study is performed by the CAISO,<sup>1215</sup> the Interconnection Customer shall pay only the costs of those activities performed by the Participating TO to adequately review or validate that Interconnection Study.<sup>1216</sup>

**4. Phase I Interconnection Study.**<sup>1217</sup>

#### 4.1 Grouping Interconnection Requests and Base Cases.<sup>1218</sup>

Interconnection Requests in the Transition Cluster shall be grouped in accordance with LGIP Section 6.1. Rather than Generation submitted during a Queue Cluster Window, the Interconnection Base Case Data for the Transition Cluster shall reflect the Generation from those Interconnection Requests that satisfy the requirements of Sections 3.1 and 3.2 of this Appendix 2 to the LGIP.<sup>1219</sup>

#### 4.2 Schedule.<sup>1220</sup>

The Phase I Interconnection Study, as described in LGIP Section 6, including the grouping and Interconnection Base Case Data development, for the Transition Cluster shall commence no later than December 1, 2008 or sixty (60) calendar days after the effective date of this Appendix 2 to the LGIP, whichever is later. Results of the Phase I Interconnection Study shall be provided to the Interconnection Customer within two hundred forty (240) calendar days after commencement under this Section.<sup>1221</sup>

Attachment A to<sup>1222</sup>  
Interconnection Feasibility<sup>1223</sup>  
Study Agreement<sup>1224</sup>

#### 4.3 Results Meeting.<sup>1225</sup>

Within sixty (60) calendar days after providing the Phase I Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s), the CAISO and the Interconnection Customer shall meet to discuss the results of the Phase I Interconnection Study, including assigned cost responsibility.<sup>1226</sup>

### ASSUMPTIONS USED IN CONDUCTING THE<sup>1227</sup> INTERCONNECTION FEASIBILITY STUDY.<sup>1228</sup>

#### 5. Phase II Interconnection Study.<sup>1229</sup>

##### 5.1 Phase II Interconnection Study Procedures.<sup>1230</sup>

The Interconnection Feasibility Study will be based upon the<sup>1231</sup> information set forth in<sup>1232</sup> the Interconnection<sup>1233</sup> Request and agreed upon in the Scoping Meeting held on<sup>1234,1235</sup>

The Phase II Interconnection Study, as described in LGIP Section 7, for the Transition Cluster shall commence no later than one hundred twenty (120) calendar days after publication of the Phase I Interconnection Study report. Results of the Phase II Interconnection Study shall be provided to the Interconnection Customer within three hundred thirty (330) calendar days after commencement under this Section.<sup>1236</sup>

Designation of Point of Interconnection and configuration to be studied.<sup>1237</sup>

##### 5.2 Coordination of the Phase II Interconnection Study with the Transmission Planning Process.<sup>1238</sup>

Designation of alternative Point(s) of Interconnection and configuration.<sup>1239</sup>

As part of the Uniform Planning Assumptions and Study Plan developed under Section 24 of the CAISO Tariff during calendar year 2009, the CAISO shall include

**technical analyses intended to identify, at a minimum, conceptual transmission upgrades that may access proposed Large Generating Facilities included in the Transition Cluster that are located in Energy Resource Areas.**<sup>1240</sup>

[Above assumptions to be completed by the<sup>1241</sup>

**6.**<sup>1242</sup> **Interconnection**<sup>1243</sup> Customer and other assumptions to be provided by the Interconnection Customer and the CAISO<sup>1244</sup> **Financial Security.**<sup>1245</sup>

**The provisions of LGIP Section 9 shall apply to the Transition Cluster, except that the initial posting of Interconnection Financial Security under LGIP Section 9.2 in Appendix Y shall be required on or before one hundred twenty (120) calendar days after publication of the Phase I Interconnection Study report.**<sup>1246</sup>

**Appendix 3 to LGIP**<sup>1247</sup>

**LARGE GENERATOR**<sup>1248</sup> **INTERCONNECTION SYSTEM IMPACT**<sup>1249</sup> **STUDY PROCESS**<sup>1250</sup>  
**AGREEMENT**

**THIS AGREEMENT** is made and entered into this \_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_, ("Interconnection Customer") and the California Independent System Operator Corporation, a California nonprofit public benefit corporation existing under the laws of the State of California, ("CAISO"). The Interconnection Customer and the CAISO each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

**WHEREAS**, the Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_; and

**WHEREAS**, the Interconnection Customer desires to interconnect the Large Generating Facility with the CAISO Controlled Grid; and

~~**WHEREAS**, the CAISO has completed an Interconnection Feasibility Study (the "Feasibility Study") and provided the results of said study to the Interconnection Customer~~<sup>1251</sup>;  
~~and~~<sup>1253</sup> **WHEREAS**, the<sup>1254</sup> Interconnection Customer has requested the CAISO to conduct or cause to be performed an<sup>1255</sup> Interconnection System Impact Study<sup>1256</sup> **Studies**<sup>1257</sup> to assess the **system**<sup>1258</sup> impact of interconnecting the Large Generating Facility **to the CAISO Controlled Grid and to specify and estimate the cost of the equipment, engineering, procurement and construction work needed on the Participating TO's electric system**<sup>1259</sup> in accordance with Good Utility Practice to physically and electrically connect the Large Generating Facility to the CAISO Controlled Grid<sup>1260</sup>;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the CAISO's FERC-approved Standard<sup>1261</sup> Large Generation Interconnection Procedures **in CAISO Tariff Appendix Y**<sup>1262</sup> ("LGIP") or the Master Definitions Supplement, Appendix A to the CAISO Tariff, as applicable.
- 2.0 The Interconnection Customer elects and the CAISO shall conduct or cause to be performed an<sup>1263</sup> Interconnection System Impact Study<sup>1264</sup> **Studies, including any accelerated Interconnection Study,**<sup>1265</sup> consistent with the LGIP in accordance with the CAISO Tariff.

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<sup>4</sup> ~~This recital to be omitted if the Interconnection Customer has elected to forego the Interconnection Feasibility Study.~~<sup>1252</sup>

- 3.0 The scope of the Interconnection System Impact Study<sup>1266</sup> **Studies**<sup>1267</sup> shall be subject to the assumptions set forth in Attachment<sup>1268</sup> **Appendices**<sup>1269</sup> A **and B**<sup>1270</sup> to this Agreement.
- 4.0 The Interconnection System Impact Study<sup>1271</sup> **Studies**<sup>1272</sup> will be based upon the results of the Interconnection Feasibility Study and the<sup>1273</sup> technical information provided by the Interconnection Customer in the Interconnection Request, **as may be modified as the result of the Scoping Meeting,**<sup>1274</sup> subject to any modifications in accordance with Section 4.4 of<sup>1275</sup> **6.7.2 of the LGIP and modifications to the proposed Commercial Operation Date of the Large Generating Facility permitted by**<sup>1276</sup> the LGIP. The CAISO reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection System Impact Study<sup>1277</sup> **Studies**<sup>1278</sup>. If the Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the<sup>1279</sup> Interconnection System Impact Study<sup>1280</sup> **Studies**<sup>1281</sup> may be extended<sup>1282</sup> **modified as specified in the LGIP**<sup>1283</sup>.
- 5.0 The Interconnection System Impact<sup>1284</sup> Study report **for each Interconnection Study**<sup>1285</sup> shall provide the following<sup>1286</sup> information:<sup>1287</sup>
- identification of any circuit breaker short circuit capability limits exceeded on the Participating TO's electric system or the CAISO Controlled Grid as a result of the interconnection;<sup>1288</sup>
  - identification of any thermal overload or voltage limit violations on the Participating TO's electric system or the CAISO Controlled Grid resulting from the interconnection;<sup>1289</sup>
  - identification of any instability or inadequately damped response to system disturbances on the Participating TO's electric system or the CAISO Controlled Grid resulting from the interconnection;<sup>1290</sup>
  - a description and non-binding, good faith estimate of cost and cost responsibility for and time for construction of facilities on the Participating TO's electric system required to interconnect the Large Generating Facility to the CAISO Controlled Grid and to address the identified short circuit, instability, and power flow issues on the CAISO Controlled Grid;<sup>1291</sup>
  - a Deliverability Assessment on the CAISO Controlled Grid pursuant to Section 3.3 of the LGIP; and<sup>1292</sup> — assessment of the potential magnitude of financial impacts, if any, on Local Furnishing Bonds and a proposed resolution.<sup>1293</sup> **specified in the LGIP.**<sup>1294</sup>
- 6.0 The Interconnection Customer shall provide a deposit of \$50,000<sup>1295</sup> **an Interconnection Study Deposit, a Site Exclusivity Deposit, if applicable, and other Interconnection Financial Security**<sup>1296</sup> for the performance of the Interconnection System Impact Study. The good faith estimate for the time of



completion of the Interconnection System Impact Study is  
\_\_\_\_\_ [insert date].<sup>1297</sup> **Studies in accordance with the provisions  
of Sections 3.5.1 and 9 of the LGIP.**<sup>1298</sup>

Following the issuance of the <sup>1299</sup> **an** <sup>1300</sup> Interconnection System Impact <sup>1301</sup> Study **report**<sup>1302</sup>, the CAISO shall charge and the Interconnection Customer shall pay **its share of**<sup>1303</sup> the actual costs of the Interconnection System Impact Study, inclusive of any re-studies and amendments to the Interconnection System Impact Study, pursuant to Section 9 of this Agreement <sup>1304</sup> **Study pursuant to Sections 3.5.1 and 7.8 of the LGIP**<sup>1305</sup>.

Any difference between the deposit<sup>1306</sup> **deposits**<sup>1307</sup> made toward the Interconnection System Impact<sup>1308</sup> Study, amendments and re-studies to the Interconnection System Impact Study<sup>1309</sup> **process and associated administrative costs, including any accelerated studies**<sup>1310</sup>, and the actual cost of the study<sup>1311</sup> **Interconnection Studies and associated administrative costs**<sup>1312</sup> shall be paid by or refunded to the Interconnection Customer, as <sup>1313</sup> **in the**<sup>1314</sup> appropriate **allocation,**<sup>1315</sup> in accordance with Section 43.3<sup>1316</sup> **3.5.1**<sup>1317</sup> of the LGIP.

- 7.0 Pursuant to Section 3.7 of the LGIP, the CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems. The CAISO may provide a copy of the **Phase I**<sup>1318</sup> Interconnection System Impact<sup>1319</sup> Study results to an Affected System Operator and the Western Electricity Coordinating Council. Requests for review and input from Affected System Operators or the Western Electricity Coordinating Council may arrive at any time prior to interconnection, ~~and a revision of the Interconnection System Impact Study or re-study may be required in such event~~<sup>1320</sup>.
- 8.0 Substantial portions of technical data and assumptions used to perform the **Phase I**<sup>1321</sup> Interconnection System Impact<sup>1322</sup> Study, such as system conditions, existing and planned generation, and unit modeling, may change after the CAISO provides the Interconnection System Impact<sup>1323</sup> Study results to the Interconnection Customer. **Interconnection**<sup>1324</sup> Study results will reflect available data at the time the CAISO provides the **Phase I**<sup>1325</sup> Interconnection System Impact<sup>1326</sup> Study **report**<sup>1327</sup> to the Interconnection Customer. The CAISO shall not be responsible for any additional costs, including, without limitation, costs of new or additional facilities, system upgrades, or schedule changes, that may be incurred by the Interconnection Customer as a result of changes in such data and assumptions.
- 9.0 ~~In the event that a re-study or amendment of the Interconnection System Impact Study is required, the CAISO shall provide notification of the need for such re-study or amendment, and the Interconnection Customer shall provide direction as to whether to proceed with the re-study or amendment and any associated deposit payment pursuant to Section 7.6 or Section 12.2.4 of the LGIP, as applicable.~~<sup>1328</sup>
- 9.0 [NOT USED]**<sup>1329</sup>

- 10.0 The CAISO shall maintain records and accounts of all costs incurred in performing the Interconnection System Impact Study, inclusive of any re-studies or amendments thereto, <sup>1330</sup> **Study** <sup>1331</sup> in sufficient detail to allow verification of all costs incurred, including associated overheads. The Interconnection Customer shall have the right, upon reasonable notice, within a reasonable time at the CAISO's offices and at its own expense, to audit the CAISO's records as necessary and as appropriate in order to verify costs incurred by the CAISO. Any audit requested by the Interconnection Customer shall be completed, and written notice of any audit dispute provided to the CAISO representative, within one hundred eighty (180) calendar days following receipt by the Interconnection Customer of the CAISO's notification of the final costs of the Interconnection System Impact Study, inclusive of any re-study or amendment thereto <sup>1332</sup> **Study** <sup>1333</sup>.
- 11.0 In accordance with Section 3.8 of the LGIP, the Interconnection Customer may withdraw its Interconnection Request at any time by written notice to the CAISO. Upon receipt of such notice, this Agreement shall terminate, subject to the requirements of Section 3.5.1 and 13.1 of the LGIP <sup>1334</sup>.
- ~~12.0~~ <sup>1335</sup> **12.0** <sup>1336</sup> Pursuant to Section 7-2 <sup>1337</sup> **4** <sup>1338</sup> of the LGIP, this Agreement shall become effective upon the date the fully executed Agreement and deposit specified in Section 6 of this Agreement are <sup>1339</sup> **is** <sup>1340</sup> received by the CAISO. If the CAISO does not receive the fully executed Agreement and payment <sup>1341</sup> deposit or other Interconnection Financial Security <sup>1342</sup> pursuant to Section 7-2 <sup>1343</sup> **3.5.1** <sup>1344</sup> of the LGIP, then the Interconnection Request will be deemed withdrawn upon the Interconnection Customer's receipt of written notice by the CAISO pursuant to Section 3.8 of the LGIP.
- ~~13.0~~ <sup>1345</sup> **13.0** <sup>1346</sup> Miscellaneous.
- 13.1 Dispute Resolution. Any dispute, or assertion of a claim, arising out of or in connection with this ~~Interconnection System Impact Study~~ <sup>1347</sup> Agreement, shall be resolved in accordance with Section 13.5 of the LGIP.
- 13.2 Confidentiality. Confidential Information shall be treated in accordance with Section 13.1 of the LGIP.
- 13.3 Binding Effect. This ~~Interconnection System Impact Study~~ <sup>1348</sup> Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 13.4 Conflicts. In the event of a conflict between the body of this ~~Interconnection System Impact Study~~ <sup>1349</sup> Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this ~~Interconnection System Impact Study~~ <sup>1350</sup> Agreement shall prevail and be deemed the final intent of the Parties.
- 13.5 Rules of Interpretation. This ~~Interconnection System Impact Study~~ <sup>1351</sup> Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this ~~Interconnection System Impact Study~~ <sup>1352</sup> Agreement, and

reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this ~~Interconnection System Impact Study~~<sup>1353</sup> Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article or Section of this ~~Interconnection System Impact Study~~<sup>1354</sup> Agreement or such Appendix to this ~~Interconnection System Impact Study~~<sup>1355</sup> Agreement, or such Section ~~to~~<sup>1356</sup> **of**<sup>1357</sup> the LGIP or such Appendix to the LGIP, as the case may be; (6) “hereunder”, “hereof”, “herein”, “hereto” and words of similar import shall be deemed references to this ~~Interconnection System Impact Study~~<sup>1358</sup> Agreement as a whole and not to any particular Article, Section, or other provision hereof or thereof; (7) “including” (and with correlative meaning “include”) means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, “from” means “from and including”, “to” means “to but excluding” and “through” means “through and including”.

- 13.6 Entire Agreement. This ~~Interconnection System Impact Study~~<sup>1359</sup> Agreement, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this ~~Interconnection System Impact Study~~<sup>1360</sup> Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party’s compliance with its obligations under this ~~Interconnection System Impact Study~~<sup>1361</sup> Agreement.
- 13.7 No Third Party Beneficiaries. This ~~Interconnection System Impact Study~~<sup>1362</sup> Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.
- 13.8 Waiver. The failure of a Party to this ~~Interconnection System Impact Study~~<sup>1363</sup> Agreement to insist, on any occasion, upon strict performance of any provision of this ~~Interconnection System Impact Study~~<sup>1364</sup> Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this ~~Interconnection System Impact Study~~<sup>1365</sup> Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this ~~Interconnection System Impact Study~~<sup>1366</sup> Agreement. Termination or default of this ~~Interconnection System Impact Study~~<sup>1367</sup> Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer’s legal rights to obtain an interconnection from the Participating TO or CAISO. Any waiver of this

~~Interconnection System Impact Study~~<sup>1368</sup> Agreement shall, if requested, be provided in writing.

Any waivers at any time by any Party of its rights with respect to any default under this ~~Interconnection System Impact Study~~<sup>1369</sup> Agreement, or with respect to any other matter arising in connection with this ~~Interconnection System Impact Study~~<sup>1370</sup> Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this ~~Interconnection System Impact Study~~<sup>1371</sup> Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this ~~Interconnection System Impact Study~~<sup>1372</sup> Agreement shall not constitute or be deemed a waiver of such right.

- 13.9 Headings. The descriptive headings of the various Articles and Sections of this ~~Interconnection System Impact Study~~<sup>1373</sup> Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this ~~Interconnection System Impact Study~~<sup>1374</sup> Agreement.
- 13.10 Multiple Counterparts. This ~~Interconnection System Impact Study~~<sup>1375</sup> Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 13.11 Amendment. The Parties may by mutual agreement amend this ~~Interconnection System Impact Study~~<sup>1376</sup> Agreement by a written instrument duly executed by both of the Parties.
- 13.12 Modification by the Parties. The Parties may by mutual agreement amend the Appendices to this ~~Interconnection System Impact Study~~<sup>1377</sup> Agreement by a written instrument duly executed by both of the Parties. Such amendment shall become effective and a part of this ~~Interconnection System Impact Study~~<sup>1378</sup> Agreement upon satisfaction of all applicable laws and regulations.
- 13.13 Reservation of Rights. The CAISO shall have the right to make a unilateral filing with FERC to modify this ~~Interconnection System Impact Study~~<sup>1379</sup> Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this ~~Interconnection System Impact Study~~<sup>1380</sup> Agreement pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this ~~Interconnection System Impact Study~~<sup>1381</sup> Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 13.14 No Partnership. This ~~Interconnection System Impact Study~~<sup>1382</sup> Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on

behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.

- 13.15 Assignment. This ~~Interconnection System Impact Study~~<sup>1383</sup> Agreement may be assigned by a Party only with the written consent of the other Party; provided that a Party may assign this ~~Interconnection System Impact Study~~<sup>1384</sup> Agreement without the consent of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this ~~Interconnection System Impact Study~~<sup>1385</sup> Agreement; and provided further that the Interconnection Customer shall have the right to assign this ~~Interconnection System Impact Study~~<sup>1386</sup> Agreement, without the consent of the other Party, for collateral security purposes to aid in providing financing for the Large Generating Unit<sup>1387</sup> **Facility**<sup>1388</sup>, provided that the Interconnection Customer will require any secured party, trustee or mortgagee to notify the other Party of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this ~~Article~~<sup>1389</sup> **Section**<sup>1390</sup> will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the other Party of the date and particulars of any such exercise of assignment right(s). Any attempted assignment that violates this ~~Article~~<sup>1391</sup> **Section**<sup>1392</sup> is void and ineffective. Any assignment under this ~~Interconnection System Impact Study~~<sup>1393</sup> Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

**IN WITNESS THEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

**California Independent System Operator Corporation**

By: \_\_\_\_\_

**Printed Name:** \_\_\_\_\_ 1394

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[Insert name of the Interconnection Customer]**

By: \_\_\_\_\_

**Printed Name:** \_\_\_\_\_ 1395

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Appendix A**<sup>1397</sup>

**Large Generator**<sup>1398</sup> **Interconnection System Impact**<sup>1399</sup>  
**Study Process**<sup>1400</sup> **Agreement**

**ASSUMPTIONS USED IN CONDUCTING THE**  
**PHASE I**<sup>1401</sup> **INTERCONNECTION SYSTEM IMPACT**<sup>1402</sup> **STUDY**

The **Phase I**<sup>1403</sup> ~~Interconnection System Impact~~<sup>1404</sup> Study will be based upon the results of <sup>1405</sup> information set forth in<sup>1406</sup> the ~~Interconnection Feasibility Study~~<sup>1407</sup> Request and agreed upon in the Scoping Meeting held on<sup>1408</sup>, subject to any modifications in accordance with Section 4.4<sup>1409</sup> **6.7.2**<sup>1410</sup> of the LGIP, and the following assumptions:

Designation of Point of Interconnection and configuration to be studied.

Designation of alternative Point(s) of Interconnection and configuration.<sup>1411</sup>

~~[Above assumptions to be completed by the Interconnection Customer and other assumptions to be provided by the Interconnection Customer and the CAISO~~<sup>1412</sup>

**INTERCONNECTION FACILITIES STUDY AGREEMENT**<sup>1413</sup>

**THIS AGREEMENT** is made and entered into this \_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_, ("Interconnection Customer") and the California Independent System Operator Corporation, a California nonprofit public benefit corporation existing under the laws of the State of California, ("CAISO"). The Interconnection Customer and the CAISO each may be referred to as a "Party," or collectively as the "Parties."<sup>1414</sup>

**RECITALS**<sup>1415</sup>

**WHEREAS**, the Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_; and<sup>1416</sup>

**WHEREAS**, the Interconnection Customer desires to interconnect the Large Generating Facility with the CAISO Controlled Grid;<sup>1417</sup>

**WHEREAS**, the CAISO has completed an Interconnection System Impact Study (the "System Impact Study") and provided the results of said study to the Interconnection Customer; and<sup>1418</sup>

**WHEREAS**, the Interconnection Customer has requested the CAISO to conduct or cause to be performed an Interconnection Facilities Study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed on the Participating TO's electric system to implement the conclusions of the Interconnection System Impact Study<sup>1419</sup> in

~~accordance with Good Utility Practice to physically and electrically connect the Large Generating Facility to the CAISO Controlled Grid~~<sup>1420 1421</sup>

**NOW, THEREFORE,** in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:<sup>1422</sup>

- 1.0 — ~~When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the CAISO's FERC approved Standard Large Generation Interconnection Procedures ("LGIP") or the Master Definitions Supplement, Appendix A to the CAISO Tariff, as applicable.~~<sup>1423</sup>
- 2.0 — ~~The Interconnection Customer elects and the CAISO shall conduct or cause to be performed an Interconnection Facilities Study consistent with the LGIP in accordance with the CAISO Tariff.~~<sup>1424</sup>
- 3.0 — ~~The scope of the Interconnection Facilities Study shall be subject to the assumptions set forth in Attachment A and the data provided in Attachment B to this Agreement.~~<sup>1425</sup>
- 4.0 — ~~The Interconnection Facilities Study report (i) shall provide a description, estimated cost, including, if applicable, the cost of remedial measures that address the financial impacts, if any, on Local Furnishing Bonds, of (consistent with Attachment A), and schedule for required facilities or for effecting remedial measures that address the financial impacts, if any, on Local Furnishing Bonds within each Participating TO's electric system to interconnect the Large Generating Facility to the CAISO Controlled Grid and (ii) shall address the short circuit, instability, and power flow issues identified in the Interconnection System Impact Study.~~<sup>1426</sup>
- 5.0 — ~~The Interconnection Customer shall provide a deposit of the greater of \$100,000 or the Interconnection Customer's portion of the estimated monthly cost for the performance of the Interconnection Facilities Study. The time for completion of the Interconnection Facilities Study is specified in Attachment A.~~<sup>1427</sup>

~~For studies where the estimated cost exceeds \$100,000, the CAISO may invoice Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection Facilities Study for the remaining balance of the estimated Interconnection Facilities Study cost. The Interconnection Customer shall pay invoiced amounts within thirty (30) calendar days of receipt of invoice. The CAISO shall continue to hold the amounts on deposit until settlement of the final invoice.~~<sup>1428</sup>

~~Following the issuance of the Interconnection Facilities Study, the CAISO shall charge and the Interconnection Customer shall pay the actual costs of the Interconnection Facilities Study, inclusive of any re-studies and amendments to the Interconnection Facilities Study, pursuant to Section 9 of this Agreement.~~<sup>1429</sup>

~~Any difference between the deposit made toward the Interconnection Facilities Study and the actual cost of the study, inclusive of any re-studies and amendments thereto, shall be paid by or refunded to the Interconnection Customer, as appropriate in accordance with Section 13.3 of the LGIP.~~<sup>1430</sup>

- 6.0 — ~~The Interconnection Facilities Study will be based upon the results of the Interconnection System Impact Study and the technical information provided by~~



~~the Interconnection Customer in the Interconnection Request, subject to any modifications in accordance with Section 4.4 of the LGIP. The CAISO reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Facilities Study.~~<sup>1431</sup>

- ~~\_\_\_\_\_ If the Interconnection Customer modifies its Interconnection Request or the technical information provided therein is modified, the time to complete the Interconnection Facilities Study may be extended.~~<sup>1432</sup>
- ~~7.0 Pursuant to Section 3.7 of the LGIP, the CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems. The CAISO may provide a copy of the Interconnection Facilities Study results to an Affected System Operator and the Western Electricity Coordinating Council. Requests for review and input from Affected System Operators or the Western Electricity Coordinating Council may arrive at any time prior to interconnection, and a revision of the Interconnection Facilities Study or re-study may be required in such event.~~<sup>1433</sup>
- ~~8.0 Substantial portions of technical data and assumptions used to perform the Interconnection Facilities Study, such as system conditions, existing and planned generation, and unit modeling, may change after the CAISO provides the Interconnection Facilities Study results to the Interconnection Customer. Study results will reflect available data at the time the CAISO provides the Interconnection Facilities Study to the Interconnection Customer. The CAISO shall not be responsible for any additional costs, including, without limitation, costs of new or additional facilities, system upgrades, or schedule changes, that may be incurred by the Interconnection Customer as a result of changes in such data and assumptions.~~<sup>1434</sup>
- ~~9.0 In the event that a re-study or amendment of the Interconnection Facilities Study is required, the CAISO shall provide notification of the need for such re-study or amendment, and the Interconnection Customer shall provide direction as to whether to proceed with the re-study or amendment and any associated deposit payment pursuant to Section 8.5 or Section 12.2.4 of the LGIP, as applicable.~~<sup>1435</sup><sup>1436</sup>
- ~~10.0 The CAISO shall maintain records and accounts of all costs incurred in performing the Interconnection Facilities Study, inclusive of any re-studies or amendments thereto, in sufficient detail to allow verification of all costs incurred, including associated overhead. The Interconnection Customer shall have the right, upon reasonable notice, within a reasonable time at the CAISO's offices and at its own expense, to audit the CAISO's records as necessary and as appropriate in order to verify costs incurred by the CAISO. Any audit requested by the Interconnection Customer shall be completed, and written notice of any audit dispute provided to the CAISO within one hundred eighty (180) calendar days following receipt by the Interconnection Customer of the CAISO's notification of the final costs of the Interconnection Facilities Study, inclusive of any re-study or amendment thereto.~~<sup>1437</sup>
- ~~11.0 In accordance with Section 3.8 of the LGIP, the Interconnection Customer may withdraw its Interconnection Request at any time by written notice to the CAISO. Upon receipt of such notice, this Agreement shall terminate.~~<sup>1438</sup>

- ~~12.0 Pursuant to Section 8.1 of the LGIP, this Agreement shall become effective upon the date the fully executed Agreement and deposit specified in Section 6 of this Agreement are received by the CAISO. If the CAISO does not receive the fully executed Agreement and payment pursuant to Section 8.1 of the LGIP, then the Interconnection Request will be deemed withdrawn upon the Interconnection Customer's receipt of written notice by the CAISO pursuant to Section 3.8 of the LGIP.<sup>1439</sup>~~
- ~~13.0 Miscellaneous.<sup>1440</sup>~~
- ~~13.1 Dispute Resolution. Any dispute, or assertion of a claim, arising out of or in connection with this Interconnection Facilities Study Agreement, shall be resolved in accordance with Section 13.5 of the LGIP.<sup>1441</sup>~~
- ~~13.2 Confidentiality. Confidential Information shall be treated in accordance with Section 13.1 of the LGIP.<sup>1442</sup>~~
- ~~13.3 Binding Effect. This Interconnection Facilities Study Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.<sup>1443</sup>~~
- ~~13.4 Conflicts. In the event of a conflict between the body of this Interconnection Facilities Study Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Interconnection Facilities Study Agreement shall prevail and be deemed the final intent of the Parties.<sup>1444</sup>~~
- ~~13.5 Rules of Interpretation. This Interconnection Facilities Study Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Interconnection Facilities Study Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Interconnection Facilities Study Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article or Section of this Interconnection Facilities Study Agreement or such Appendix to this Interconnection Facilities Study Agreement, or such Section to the LGIP or such Appendix to the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Interconnection Facilities Study Agreement as a whole and not to any particular Article, Section, or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".<sup>1445</sup>~~

~~13.6 Entire Agreement. This Interconnection Facilities Study Agreement, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Interconnection Facilities Study Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Interconnection Facilities Study Agreement.~~<sup>1446</sup>

~~13.7 No Third Party Beneficiaries. This Interconnection Facilities Study Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.~~<sup>1447</sup>

~~13.8 Waiver. The failure of a Party to this Interconnection Facilities Study Agreement to insist, on any occasion, upon strict performance of any provision of this Interconnection Facilities Study Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.~~<sup>1448</sup>

~~Any waiver at any time by either Party of its rights with respect to this Interconnection Facilities Study Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Interconnection Facilities Study Agreement. Termination or default of this Interconnection Facilities Study Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO or CAISO. Any waiver of this Interconnection Facilities Study Agreement shall, if requested, be provided in writing.~~<sup>1449</sup>

~~Any waivers at any time by any Party of its rights with respect to any default under this Interconnection Facilities Study Agreement, or with respect to any other matter arising in connection with this Interconnection Facilities Study Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Interconnection Facilities Study Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Interconnection Facilities Study Agreement shall not constitute or be deemed a waiver of such right.~~<sup>1450</sup>

~~13.9 Headings. The descriptive headings of the various Articles and Sections of this Interconnection Facilities Study Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Interconnection Facilities Study Agreement.~~<sup>1451</sup>

~~13.10 Multiple Counterparts. This Interconnection Facilities Study Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.~~<sup>1452</sup>

~~13.11 Amendment. The Parties may by mutual agreement amend this Interconnection Facilities Study Agreement by a written instrument duly executed by both of the Parties.~~<sup>1453</sup>

- ~~13.12—Modification by the Parties. The Parties may by mutual agreement amend the Appendices to this Interconnection Facilities Study Agreement by a written instrument duly executed by both of the Parties. Such amendment shall become effective and a part of this Interconnection Facilities Study Agreement upon satisfaction of all applicable laws and regulations.~~<sup>1454</sup>
- ~~13.13—Reservation of Rights. The CAISO shall have the right to make a unilateral filing with FERC to modify this Interconnection Facilities Study Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Interconnection Facilities Study Agreement pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Interconnection Facilities Study Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.~~<sup>1455</sup>
- ~~13.14—No Partnership. This Interconnection Facilities Study Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.~~<sup>1456</sup>
- ~~13.15—Assignment. This Interconnection Facilities Study Agreement may be assigned by a Party only with the written consent of the other Party; provided that a Party may assign this Interconnection Facilities Study Agreement without the consent of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Interconnection Facilities Study Agreement; and provided further that the Interconnection Customer shall have the right to assign this Interconnection Facilities Study Agreement, without the consent of the other Party, for collateral security purposes to aid in providing financing for the Large Generating Unit, provided that the Interconnection Customer will require any secured party, trustee or mortgagee to notify the other Party of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the other Party of the date and particulars of any such exercise of assignment right(s). Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Interconnection Facilities Study Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.~~<sup>1457</sup>

~~IN WITNESS WHEREOF~~, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.<sup>1458</sup>

~~California Independent System Operator Corporation~~<sup>1459</sup>

By: \_\_\_\_\_<sup>1460</sup>

Title: \_\_\_\_\_<sup>1461</sup>

Date: \_\_\_\_\_<sup>1462</sup>

~~[Insert name of the Interconnection Customer]~~<sup>1463</sup>

By: \_\_\_\_\_<sup>1464</sup>

Title: \_\_\_\_\_<sup>1465</sup>

Date: \_\_\_\_\_<sup>1466</sup>

~~Attachment A~~<sup>1467</sup>

~~Interconnection Facilities  
Study Agreement~~<sup>1468</sup>  
<sup>1469</sup>

~~INTERCONNECTION CUSTOMER SCHEDULE ELECTION FOR CONDUCTING THE  
INTERCONNECTION FACILITIES STUDY~~<sup>1470</sup>

~~The CAISO shall use Reasonable Efforts to complete the study and issue a draft Interconnection Facilities Study report to the Interconnection Customer. Prior to issuing draft study results to the Interconnection Customer, the Participating TO and CAISO shall share results for review and incorporate comments within the following number of days after of receipt of an executed copy of this Interconnection Facilities Study Agreement:~~<sup>1471</sup>

~~\_\_\_\_\_ one hundred twenty (120) calendar days with no more than a +/- 20 percent cost estimate contained in the report, or~~<sup>1472</sup>

~~\_\_\_\_\_ two hundred ten (210) calendar days with no more than a +/- 10 percent cost estimate contained in the report.~~<sup>1473</sup>

~~Deliverability status requested (full capacity or Energy only)~~<sup>1474</sup>

~~Attachment B~~<sup>1475</sup>

**Appendix B**<sup>1476</sup>

**Interconnection Facilities**<sup>1477</sup>  
**Large Generator Interconnection**<sup>1478</sup>  
**Study Process**<sup>1479</sup> **Agreement**

**DATA FORM TO BE PROVIDED BY THE INTERCONNECTION CUSTOMER**  
**WITH**<sup>1480</sup> **PRIOR TO COMMENCEMENT OF**<sup>1481</sup> **THE PHASE II**<sup>1482</sup> **INTERCONNECTION**  
**FACILITIES STUDY AGREEMENT**<sup>1483</sup> **STUDY**<sup>1484</sup>

**Generating Facility size (MW):** \_\_\_\_\_<sup>1485</sup>

Provide two copies of this completed form and other required plans and diagrams in accordance with Section 8.4<sup>1486</sup> **7.1**<sup>1487</sup> of the LGIP.

Provide location plan and one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.

One set of metering is required for each generation connection to the new bus or existing CAISO Controlled Grid station. Number of generation connections: \_\_\_\_\_

On the one line indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)

On the one line indicate the location of auxiliary power. (Minimum load on CT/PT)

Will an alternate source of auxiliary power be available during CT/PT maintenance?  
Yes \_\_\_\_\_ No \_\_\_\_\_

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? \_\_\_\_\_ Yes \_\_\_\_\_ No  
(Please indicate on one line).

What type of control system or PLC will be located at the Interconnection Customer's Large Generating Facility?

\_\_\_\_\_

What protocol does the control system or PLC use?

\_\_\_\_\_

Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.

Physical dimensions of the proposed interconnection station:

Bus length from generation to interconnection station:



## RECITALS<sup>1495</sup>

~~**WHEREAS**, the Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated~~

~~<sup>1496</sup>  
7~~

~~**WHEREAS**, the Interconnection Customer is proposing to establish an interconnection with the CAISO Controlled Grid; and~~<sup>1497</sup>

~~**WHEREAS**, the Interconnection Customer has submitted to the CAISO an Interconnection Request; and~~<sup>1498</sup>

~~**WHEREAS**, on or after the date when the Interconnection Customer receives the Interconnection System Impact Study results, the Interconnection Customer has further requested that the CAISO conduct or cause to be performed an Optional Interconnection Study;~~<sup>1499</sup>

~~**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:~~<sup>1500</sup>

- ~~1.0 — When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the CAISO's FERC-approved Standard Large Generation Interconnection Procedures ("LGIP") or the Master Definitions Supplement, Appendix A to the CAISO Tariff, as applicable.~~<sup>1501</sup>
- ~~2.0 — The Interconnection Customer elects and the CAISO shall conduct or cause to be performed an Optional Interconnection Study consistent with the LGIP in accordance with the CAISO Tariff.~~<sup>1502</sup>
- ~~3.0 — The scope of the Optional Interconnection Study shall be subject to the assumptions set forth in Attachment A to this Agreement.~~<sup>1503</sup>
- ~~4.0 — The Optional Interconnection Study shall be performed solely for informational purposes.~~<sup>1504</sup>
- ~~5.0 — The Optional Interconnection Study report shall provide a sensitivity analysis based on the assumptions specified by the Interconnection Customer in Attachment A to this Agreement. The Optional Interconnection Study will identify the Participating TO's Interconnection Facilities and the Network Upgrades, and the estimated cost thereof, including, if applicable, the cost of remedial measures that address the financial impacts, if any, on Local Furnishing Bonds, that may be required to provide transmission service or interconnection service based upon the assumptions specified by the Interconnection Customer in Attachment A.~~<sup>1505</sup>
- ~~6.0 — The Interconnection Customer shall provide a deposit of \$10,000 for the performance of the Optional Interconnection Study. The CAISO's good faith estimate for the time of completion of the Optional Interconnection Study is \_\_\_\_\_ [insert date].~~<sup>1506</sup>  
~~Following the issuance of the Optional Interconnection Study, the CAISO shall charge and the Interconnection Customer shall pay the actual costs of the Optional Interconnection Study.~~<sup>1507</sup>



~~Any difference between the initial payment and the actual cost of the study shall be paid by or refunded to the Interconnection Customer, as appropriate.~~<sup>1508</sup>

~~7.0 Substantial portions of technical data and assumptions used to perform the Optional Interconnection Study, such as system conditions, existing and planned generation, and unit modeling, may change after the CAISO provides the Optional Interconnection Study results to the Interconnection Customer. Study results will reflect available data at the time the CAISO provides the Optional Interconnection Study to the Interconnection Customer. The CAISO shall not be responsible for any additional costs, including without limitation, costs of new or additional facilities, system upgrades, or schedule changes, that may be incurred by the Interconnection Customer as a result of changes in such data and assumptions.~~<sup>1509</sup>

~~8.0 The CAISO shall maintain records and accounts of all costs incurred in performing the Optional Interconnection Study in sufficient detail to allow verification of all costs incurred, including associated overheads. The Interconnection Customer shall have the right, upon reasonable notice, within a reasonable time at the CAISO's offices and at its own expense, to audit the CAISO's records as necessary and as appropriate in order to verify costs incurred by the CAISO. Any audit requested by the Interconnection Customer shall be completed, and written notice of any audit dispute provided to the CAISO representative, within one hundred eighty (180) calendar days following receipt by the Interconnection Customer of the CAISO's notification of the final costs of the Optional Interconnection Study.~~<sup>1510</sup>

~~9.0 Pursuant to Section 10.1 of the LGIP, this Agreement shall become effective upon the date the fully executed Agreement and deposit specified in Section 6 of this Agreement are received by the CAISO. If the CAISO does not receive the fully executed Agreement and payment pursuant to Section 10.1 of the LGIP, then the offer reflected in this Agreement will expire and this Agreement will be of no effect.~~<sup>1511</sup>

~~10.0 Miscellaneous.~~<sup>1512</sup>

~~10.1 Dispute Resolution. Any dispute, or assertion of a claim, arising out of or in connection with this Optional Interconnection Study Agreement, shall be resolved in accordance with Section 13.5 of the LGIP.~~<sup>1513</sup>

~~10.2 Confidentiality. Confidential Information shall be treated in accordance with Section 13.1 of the LGIP.~~<sup>1514</sup>

~~10.3 Binding Effect. This Optional Interconnection Study Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.~~<sup>1515</sup>

~~10.4 Conflicts. In the event of a conflict between the body of this Optional Interconnection Study Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Optional Interconnection Study Agreement shall prevail and be deemed the final intent of the Parties.~~<sup>1516</sup>

~~10.5 Rules of Interpretation. This Optional Interconnection Study Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference~~

~~to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Optional Interconnection Study Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Optional Interconnection Study Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article or Section of this Optional Interconnection Study Agreement or such Appendix to this Optional Interconnection Study Agreement, or such Section to the LGIP or such Appendix to the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Optional Interconnection Study Agreement as a whole and not to any particular Article, Section, or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".~~<sup>1517</sup>

~~10.6 — Entire Agreement. This Optional Interconnection Study Agreement, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Optional Interconnection Study Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Optional Interconnection Study Agreement.~~<sup>1518</sup>

~~10.7 — No Third Party Beneficiaries. This Optional Interconnection Study Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.~~<sup>1519</sup>

~~10.8 — Waiver. The failure of a Party to this Optional Interconnection Study Agreement to insist, on any occasion, upon strict performance of any provision of this Optional Interconnection Study Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.~~<sup>1520</sup>

~~Any waiver at any time by either Party of its rights with respect to this Optional Interconnection Study Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Optional Interconnection Study Agreement. Termination or default of this Optional Interconnection Study Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the other Party. Any waiver of this Optional Interconnection Study Agreement shall, if requested, be provided in writing.~~<sup>1521</sup>

~~Any waivers at any time by any Party of its rights with respect to any default under this Optional Interconnection Study Agreement, or with respect to any other matter arising in connection with this Optional Interconnection Study Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Optional Interconnection Study Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Optional Interconnection Study Agreement shall not constitute or be deemed a waiver of such right.~~<sup>1522</sup>

~~10.9 Headings. The descriptive headings of the various Articles and Sections of this Optional Interconnection Study Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Optional Interconnection Study Agreement.~~<sup>1523</sup>

~~10.10 Multiple Counterparts. This Optional Interconnection Study Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.~~<sup>1524</sup>

~~10.11 Amendment. The Parties may by mutual agreement amend this Optional Interconnection Study Agreement by a written instrument duly executed by both of the Parties.~~<sup>1525</sup>

~~10.12 Modification by the Parties. The Parties may by mutual agreement amend the Appendices to this Optional Interconnection Study Agreement by a written instrument duly executed by both of the Parties. Such amendment shall become effective and a part of this Optional Interconnection Study Agreement upon satisfaction of all applicable laws and regulations.~~<sup>1526</sup>

~~10.13 Reservation of Rights. The CAISO shall have the right to make a unilateral filing with FERC to modify this Optional Interconnection Study Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Optional Interconnection Study Agreement pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Optional Interconnection Study Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.~~<sup>1527</sup>

~~10.14 No Partnership. This Optional Interconnection Study Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.~~<sup>1528</sup>

~~10.15—Assignment. This Optional Interconnection Study Agreement may be assigned by a Party only with the written consent of the other Party; provided that a Party may assign this Optional Interconnection Study Agreement without the consent of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Optional Interconnection Study Agreement; and provided further that the Interconnection Customer shall have the right to assign this Optional Interconnection Study Agreement, without the consent of the other Party, for collateral security purposes to aid in providing financing for the Large Generating Unit, provided that the Interconnection Customer will require any secured party, trustee or mortgagee to notify the other Party of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the other Party of the date and particulars of any such exercise of assignment right(s). Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Optional Interconnection Study Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.~~<sup>1529</sup>

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.<sup>1530</sup>

**California Independent System Operator Corporation**<sup>1531</sup>

By: \_\_\_\_\_<sup>1532</sup>

Title: \_\_\_\_\_<sup>1533</sup>

Date: \_\_\_\_\_<sup>1534</sup>

**[Insert name of the Interconnection Customer]**<sup>1535</sup>

By: \_\_\_\_\_<sup>1536</sup>

Title: \_\_\_\_\_<sup>1537</sup>

Date: \_\_\_\_\_<sup>1538</sup>

**Attachment A**<sup>1539</sup>  
**Optional Interconnection**<sup>1540</sup>  
**Study Agreement**<sup>1541</sup>

**~~ASSUMPTIONS USED IN CONDUCTING~~<sup>1542</sup>  
~~THE OPTIONAL INTERCONNECTION STUDY~~<sup>1543</sup>**

~~[To be completed by the Interconnection Customer consistent with Section 10 of the LGIP.]~~<sup>1544</sup>

~~Energy Only~~<sup>1545</sup>

~~Full Capacity~~<sup>1546</sup>

Appendix 4 to LGIP<sup>1547</sup>

**AGREEMENT FOR THE ALLOCATION OF RESPONSIBILITIES WITH REGARD TO  
LARGE GENERATOR INTERCONNECTION PROCEDURES AND INTERCONNECTION STUDY  
AGREEMENTS**

This Agreement for the Allocation of Responsibilities With Regard to Large Generator Interconnection Procedures and Interconnection Study Agreements (“Agreement”), dated ~~November 4, 2005,~~<sup>1548</sup> \_\_\_\_\_,<sup>1549</sup> is entered into between the California Independent System Operator Corporation (“CAISO”) and **[NAME OF PTO]** \_\_\_\_\_ (“PTO”). The CAISO and PTO are jointly referred to as the “Parties” and individually, as a “Party.”

WHEREAS, this Agreement will ensure an independent assessment of new Large Generating Facility impacts on the CAISO Controlled Grid and take advantage of the respective expertise of the Parties to facilitate efficient and cost effective Interconnection Study procedures in a manner consistent with the Federal Energy Regulatory Commission’s (“FERC”) July 1, 2005 Order (112 FERC ¶ 61,009), FERC’s August 26, 2005 Order (112 FERC ¶ 61,231), and prior FERC Orders recognizing that Order No. 2003 did not allocate responsibilities between transmission owners and transmission providers for the provision of Interconnection Service and suggesting those parties enter into an agreement to allocate those responsibilities. Southwest Power Pool, Inc., 106 FERC ¶ 61,254 (2004).

NOW THEREFORE, in view of the respective responsibilities assigned to the Parties and the foregoing FERC orders, **and the provisions of the CAISO’s Large Generator Interconnection Procedures set forth in CAISO Tariff Appendix Y (“LGIP”).**<sup>1550</sup> the CAISO and PTO agree to the following allocation of responsibilities for a centralized Interconnection Study process under the direction and oversight of the CAISO:

**1. DEFINITIONS.**

Unless otherwise defined herein, all capitalized terms shall have the meaning set forth in the CAISO Tariff.

**2. TERM OF AGREEMENT.**

This Agreement shall become effective upon the date ~~the provisions of the CAISO Tariff implementing the centralized Interconnection Study process required by the July 1 Order and the August 26 Order are accepted and made effective by FERC,~~<sup>1551</sup> **specified in the first paragraph above**<sup>1552</sup> and shall remain in effect until (1) terminated by all Parties in writing, or (2) with respect to the PTO, upon the termination of that entity’s status as a PTO pursuant to the Transmission Control Agreement, as amended from time to time.

**3. PROVISIONS FOR ALLOCATION OF RESPONSIBILITIES BETWEEN CAISO AND PTO.**

**3.1 Interconnection Service:** The Parties acknowledge that, as the transmission provider, the CAISO is responsible for reliably operating the transmission grid. The Parties also recognize that while the CAISO is a transmission provider under the CAISO Tariff, the CAISO does not own any transmission facilities, and the PTO owns, constructs, and maintains the facilities to which Large Generating Facilities are to be interconnected, and that the PTO may construct or modify facilities to allow the interconnection. While the Parties recognize that the CAISO will be responsible for conducting or causing to be performed Interconnection Studies and similar studies, the PTO will participate in these studies and conduct certain portions of studies, under the direction and oversight of, and approval by, the CAISO, as provided in this Agreement. The CAISO shall not enter into any Interconnection Study agreement with an Interconnection Customer that is contrary to these rights.

**3.2 [INTENTIONALLY LEFT BLANK]**

**3.3 Transmission Owners' Right to Participation in Studies, Committees and Meetings:**

**3.3.1** In the event that an Interconnection Customer proposes to interconnect a Large Generating Facility with the PTO's facilities, or the PTO is an owner of an affected system, the PTO shall have the right to participate in any Interconnection Feasibility Study, Interconnection System Impact Study, Interconnection Facilities Study,<sup>1553</sup> **Study**<sup>1554</sup> or any other study conducted in connection with such request for Interconnection Service. "Participate" in this Section 3.3.1 means physically perform any study or portion thereof in connection with an Interconnection Request, under the direction and oversight of, and approval by, the CAISO pursuant to Section 3.4 of this Agreement; provide or receive input, data or other information regarding any study or portion thereof consistent with Section 3.4 of this Agreement; and, when any study or portion thereof in connection with an Interconnection Request is physically performed by an entity other than the PTO, perform activities necessary to adequately review or validate, as appropriate, any results of the study or portions thereof and provide recommendations.

**3.3.2** In the event that an Interconnection Customer proposes to interconnect a Large Generating Facility with the PTO's facilities, or the PTO is an owner of an affected system, the PTO shall have the right to participate in all meetings expressly established pursuant to the CAISO LGIP. As appropriate, the PTO may participate in all other material or substantive communications in connection with an Interconnection Request.

**3.4 Interconnection Study Responsibility Allocation:** In complying with its responsibility for conducting or causing to be performed Interconnection Studies, the CAISO will assign responsibility for performance of portions of the Interconnection Studies to the PTO, under the direction and oversight of, and approval by, the CAISO, as set forth in Attachment A, except as specifically qualified as follows:

**3.4.1** ~~Unless an Interconnection Customer specifically requests that a third party perform an Interconnection Study pursuant to LGIP Section 13.4, for~~<sup>1555</sup> **For**<sup>1556</sup> any tasks specifically assigned to the PTO pursuant to Attachment A or otherwise mutually agreed upon by the CAISO and the PTO, the CAISO reserves the right, on a case-by-case basis, to perform or reassign to a mutually agreed upon and pre-qualified contractor such task only where: (a) the quality and accuracy of prior PTO Interconnection Study work product resulting from assigned tasks has been deemed deficient by the CAISO, the CAISO has notified the PTO pursuant to the notice provision of Section 4.16 of this Agreement in writing of the deficiency, and the deficiency has not been cured pursuant to Section 3.4.2 of this Agreement; (b) the timeliness of PTO Interconnection Study work product has been deemed deficient, and either (i) the CAISO has not been notified of the reasons and actions taken to address the timeliness of the work, or (ii) if notified, the stated reasons and actions taken are insufficient or unjustifiable and the PTO has not cured the deficiency pursuant to Section 3.4.2 of this Agreement; (c) the PTO has failed, in a mutually agreed upon timeframe, to provide the CAISO with information or data related to an Interconnection Request despite a written request by the CAISO, pursuant to Section 3.5 hereof, to do so, and such data is the responsibility of the PTO to provide to the CAISO, subject to Section 4.3 of this Agreement; (d) the PTO advises the CAISO in writing that it does not have the resources to adequately or timely perform the task according to the applicable timelines set forth in

Attachment A; or (e) the estimated cost of the PTO performing the task has been determined in writing by the CAISO to significantly exceed the cost of the CAISO or mutually agreed upon contractor performing the task, inclusive of the costs that will be incurred by the PTO in exercising its review rights of the results of any such tasks performed by such third party(ies). If the CAISO deviates from the assignments set forth in Attachment A based on the foregoing factors, the CAISO will provide the PTO with a written explanation for the deviation and any associated reassignments of work. The PTO may contest the deviation pursuant to the Dispute Resolution procedures set forth in Section 4.1 of this Agreement.

Task(s) may only be reassigned in accordance with this Section 3.4.1 where the PTO has been deemed to be deficient in relation to that (those) particular task(s).

**3.4.2 Cure for re-assigned<sup>1557</sup> reassigned<sup>1558</sup> Interconnection Study work**

The CAISO shall not reassign task(s) without the opportunity to cure, as specified in Section 3.4.1 of this Agreement. The following actions will serve to cure the deficiencies and result in restoring the assignment(s) as provided in Attachment A:

- 1559 a)** The CAISO and PTO shall negotiate in good faith and agree to a corrective action plan proposed by the PTO, including a reasonably adequate cure period, and the corrective action plan is satisfactorily implemented.
- 1560 b)** The CAISO determines the deficiency is cured without an action plan.

**3.4.3** Assessment of prior PTO Interconnection Study work shall only be based on work conducted under the process that becomes effective concurrent with the effective date of this Agreement. Further, assessment of prior PTO Interconnection Study work shall be based on work conducted no earlier than the eighteen (18) month period prior to the date of the CAISO notice of deviation from assignments set forth in Attachment A to this Agreement.

**3.5 Information Exchange:** The PTO shall provide the CAISO, subject to confidentiality requirements in Section 4.3 of this Agreement, with any documentation or data requested by the CAISO reasonably necessary to permit the CAISO to perform, review, validate and approve any Interconnection Study, or portion thereof, performed by the PTO. The CAISO shall provide the PTO with any documentation or data requested by the PTO, subject to confidentiality requirements in Section 4.3 of this Agreement, reasonably necessary to perform, review, and validate any Interconnection Study, or portion thereof.

**3.6 Consistency with Provisions for Centralized Interconnection Study Process:** The CAISO and PTO have determined that the processes and allocation of responsibilities in Section 3.4 of this Agreement ensure that impacts to the CAISO Controlled Grid are independently assessed and that the assignment of responsibilities minimizes handoffs, takes advantage of non-transferable skills, and promotes the efficiency and cost-effectiveness of the centralized Interconnection Study processes, consistent with LGIP Section 3.2.

**3.7 Re-Studies:** If any re-studies are required, the CAISO will confer with the PTO as to the need for a re-study. The CAISO will make the final determination regarding the need for a re-study, subject to dispute resolution procedures.

**3.8 Use of Contractors:** Nothing in this Agreement shall prevent either the CAISO or the PTO from using qualified, mutually agreed upon third party contractors to meet that Party's rights or obligations under this Agreement or the LGIP. To promote the efficiency



of the process, the CAISO and PTO will collaborate to identify a list of the mutually agreed to qualified contractors available to the Parties.

- 3.9 Performance Standards:** Each Party shall perform all of its obligations under the LGIP, this Agreement, and any FERC approved Interconnection Study procedures that may be adopted by the CAISO to implement the LGIP or this Agreement in accordance with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice.
- 3.10 Recovery of Costs:** In accordance with Section 13.3<sup>1561</sup>, **3.5.1**<sup>1562</sup> of the LGIP, the PTOs<sup>1563</sup> **PTO**<sup>1564</sup> shall recover all actual costs from the CAISO incurred in performing Interconnection Studies or portions thereof assigned to it by the CAISO, including all costs incurred in exercising its right to review, and make recommendations on, Interconnection Studies or portions thereof performed by the CAISO and/or contractors under Section 3.8 of this Agreement.

#### 4 GENERAL TERMS AND CONDITIONS.

- 4.1 Dispute Resolution:** In the event any dispute regarding the terms, conditions, and performance of this Agreement is not settled informally, the Parties shall follow the CAISO ADR Procedures set forth in Section 13 of the CAISO Tariff.
- 4.2 Liability:** No Party to this Agreement shall be liable to any other Party for any direct, indirect, special, incidental or consequential losses, damages, claims, liabilities, costs or expenses (including attorneys fees and court costs) arising from the performance or non-performance of its obligations under this Agreement regardless of the cause (including intentional action, willful action, gross or ordinary negligence, or force majeure); provided, however, that a Party may seek equitable or other non-monetary relief as may be necessary to enforce this Agreement and that damages for which a Party may be liable to another Party under another agreement will not be considered damages under this Agreement.
- 4.3 Confidentiality:** Confidential Information shall be treated in accordance with Section 13.1 of the LGIP.
- 4.4 Binding Effect:** This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 4.5 Conflicts:** In the event of a conflict between the body of this Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.
- 4.6 Rules of Interpretation:** This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section, **Attachment**,<sup>1565</sup> or Appendix means such

Article or Section of this Agreement or such **Attachment or**<sup>1566</sup> Appendix to this Agreement, or such Section of the LGIP or such Appendix to the LGIP, as the case may be; (6) “hereunder”, “hereof”, “herein”, “hereto” and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article **or Section**<sup>1567</sup>; (7) “including” (and with correlative meaning “include”) means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, “from” means “from and including”, “to” means “to but excluding” and “through” means “through and including”.

- 4.7 Entire Agreement:** This Agreement, including all Attachments hereto, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, among the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants, which constitute any part of the consideration for, or any condition to, any Party’s compliance with its obligations under this Agreement.
- 4.8 No Third Party Beneficiaries:** This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.
- 4.9 Waiver:** The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party. Any waiver at any time by a Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Any waiver of this Agreement shall, if requested, be provided in writing. Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- 4.10 Headings:** The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.
- 4.11 Multiple Counterparts:** This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 4.12 Modification by the Parties:** The Parties may amend this Agreement and any Appendices to this Agreement only (1) by mutual agreement of the Parties by a written instrument duly executed by the Parties, subject to FERC approval or (2) upon the issuance of a FERC order, pursuant to Section 206 of the Federal Power Act. It is the Parties’ intent that FERC’s right to change any provision of this Agreement shall be limited to the maximum extent permissible by law and that any such change, if permissible, shall be in accordance with the Mobile-Sierra public interest standard applicable to fixed rate agreements. *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956). Such amendment shall become effective and a part of this Agreement upon satisfaction of all applicable laws and regulations. Notwithstanding the foregoing, Attachment B (Notices) may be modified as set forth in Section 4.15 of this Agreement, and the CAISO and the PTO may from time to time mutually agree to deviate

from Attachment A in accordance with the provisions of this Agreement, however, such deviation shall be subject to Section 4.9 of this Agreement and not considered a course of dealing.

**4.13 No Partnership:** This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.

**4.14 Assignment:** This Agreement may be assigned by a Party only with the written consent of the other Parties; provided that a Party may assign this Agreement without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater ~~credit rating~~<sup>1568</sup> **credit rating**<sup>1569</sup> and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

**4.15 Notices:** Any notice, demand, or request provided in this Agreement, or served, given, or made in connection with it, will be in writing and deemed properly served, given, or made if delivered in person, transmitted by facsimile, or sent by United States mail, postage prepaid, to the persons specified in Attachment B hereto unless otherwise provided in this Agreement. Any Party may at any time, by notice to all other Parties, change the designation or address of the person specified in Attachment B as the person who receives notices pursuant to this Agreement.

**IN WITNESS WHEREOF**<sup>1570</sup>, the Parties have executed this Agreement in multiple originals, each of which shall constitute and be an original effective agreement among the Parties.

**California Independent System Operator Corporation**

By: \_\_\_\_\_

**Printed Name:** \_\_\_\_\_ 1571

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[NAME OF PTO]**

By: \_\_\_\_\_

**Printed Name:** \_\_\_\_\_ 1572

Title: \_\_\_\_\_

Date: \_\_\_\_\_



1573 **ATTACHMENT A**

**INTERCONNECTION STUDY RESPONSIBILITY ALLOCATION**

Description of Large Generator Interconnection Process: Roles and Responsibilities of CAISO and PTOs.

**Purpose:** This Attachment A to the “AGREEMENT FOR THE ALLOCATION OF RESPONSIBILITIES WITH REGARD TO LARGE GENERATOR INTERCONNECTION PROCEDURES AND INTERCONNECTION STUDY AGREEMENTS” serves as further clarification of the roles and responsibilities of the parties to this Agreement. The CAISO will assign responsibility for performance of portions of the Interconnection Studies to the relevant PTOs, under the direction and oversight of, and approval by, the CAISO, as set forth in this Attachment A. This document serves as a general overview of only the roles and responsibilities as between the CAISO and PTOs. This Agreement does not include the process steps, involvement or obligations of the Interconnection Customer (IC). This Agreement is not inclusive of all procedures necessary to comply with all provisions of the LGIA, LGIP and Large Generator <sup>1574</sup>Interconnection Study ~~agreements~~ <sup>1575</sup>Process Agreement <sup>1576</sup>.

**Interconnection Request (IR) Process**

1. CAISO forwards the IR to the PTO within ~~one~~ <sup>1577</sup>three <sup>1578</sup> (~~4~~ <sup>1579</sup>3 <sup>1580</sup>) Business Day <sup>1581</sup>Days <sup>1582</sup> (BD) of receipt of IR from Interconnection Customer (IC)
2. PTO(s) provides any feed back regarding IR to CAISO within 3 BD
3. ~~PTO(s) provides draft study plan at Scoping Meeting.~~ <sup>1583</sup> ~~4.~~ <sup>1584</sup> CAISO distributes draft Scoping Meeting minutes for review within ~~3~~ <sup>1585</sup>5 <sup>1586</sup> BD of Scoping Meeting.
5. <sup>1587</sup>~~4.~~ <sup>1588</sup> PTO(s) provide any comments to the Scoping Meeting minutes within 2 BD of receipt of draft Scoping Meeting minutes.
6. <sup>1589</sup>~~5.~~ <sup>1590</sup> CAISO issues the final Scoping Meeting minutes within 3 BD of receipt of comments.

**Phase I**<sup>1591</sup> **Interconnection Feasibility**<sup>1592</sup> **Study Process:**<sup>1593</sup> **Timeline**<sup>1594</sup>

1. CAISO forwards IC Point of Interconnection and any LGIP Appendix 1, Attachment A data to the PTO(s) within 1 BD of CAISO receipt.<sup>1595</sup>
2. PTO(s) develop updated draft study plan based on technical data collected by CAISO from IC within 7 BD.<sup>1596</sup>
3. CAISO and PTO(s) coordinate to finalize study plan within 2 BD. CAISO approves the study plan.<sup>1597</sup>
4. CAISO tenders a signed IFSA to IC, with final study plan included in Attachment A, within 5 BD (for a total of 15 BD from CAISO receipt of Point of Interconnection from IC in accordance with LGIP Section 6.1).<sup>1598</sup>
5. After CAISO receives executed study agreement, CAISO forwards any additional LGIP Appendix 1, Attachment A data to PTO(s) within 1 BD.<sup>1599</sup>
6. If during the course of the assigned portions of the study the PTO(s) determines the data is not sufficient to complete the study, PTO(s) informs CAISO and CAISO notifies IC in accordance with LGIP Section 3.8.<sup>1600</sup>
7. PTO(s) must participate in study review meeting; date to be agreeable to PTO(s) and within 10 BD of CAISO providing study report to IC (LGIP Section 6.3.1).<sup>1601</sup>
8. CAISO and PTO collaborate on any re-study issues. CAISO will direct any necessary re-studies.<sup>1602</sup>

**Interconnection Feasibility Study Timeline**<sup>1603</sup>

|   | <b>Typical Calendar Days</b> <sup>1605</sup> | <b>Typical Cumulative Days</b> <sup>1606</sup> |
|---|--|--|
| Load Flow <sup>1604</sup>   |  |  |
| CAISO directs PTO(s) to Develop draft Base Cases (Milestone) <sup>1607</sup>  | 0 <sup>1608</sup>                            | 0 <sup>1609</sup>                              |
| PTO(s) develop draft Base Cases and deliver to CAISO <sup>1610</sup>  | 7 <sup>1611</sup>                            | 7 <sup>1612</sup>                              |
| CAISO reviews Base Cases and provides direction to PTO(s) <sup>1613</sup><br>At the direction of the CAISO, PTO(s) develops contingency lists and provide to CAISO. <sup>1614</sup>   | 7 <sup>1615</sup>                            | 14 <sup>1616</sup>                             |
| PTO incorporates CAISO directions into Base Cases; CAISO approves Base Cases; CAISO reviews and approves contingency lists. If there is disagreement on the contingency list, the CAISO and PTO(s) must coordinate to revise the contingency list. CAISO approves the contingency list. <sup>1617</sup> | 7 <sup>1618</sup>                            | 21 <sup>1619</sup>                             |
| CAISO performs Load Flow & prepares summary results of impacted systems (other PTO(s) or Affected Systems) and submits results to impacted systems. Such results may include CAISO proposed solutions for mitigation to any violations uncovered in the Load Flow study. <sup>1620</sup>                | 7 <sup>1621</sup>                            | 28 <sup>1622</sup>                             |
| Impacted PTO(s) review CAISO results and recommend mitigation solutions as appropriate. <sup>1623</sup>   | 5 <sup>1624</sup>                            | 33 <sup>1625</sup>                             |
| <b>Short Circuit Duty (concurrent with Load Flow Activity)</b> <sup>1626</sup>  |  |  |
| At the CAISO's direction, PTO(s) develop Base Case, and run short circuit analyses. <sup>1627</sup>   | 40 <sup>1628</sup>                           | 40 <sup>1629</sup>                             |
| PTO(s) to perform facilities review <sup>1630</sup>   | 48 <sup>1631</sup>                           | 28 <sup>1632</sup>                             |

|  |                              |                               |
|--|------------------------------|-------------------------------|
| <del>PTO(s) prepare draft study results and submit to the CAISO for review, recommendations and direction.</del> <sup>1633</sup>   | <del>5</del> <sup>1634</sup> | <del>33</del> <sup>1635</sup> |
| <del>lity cost estimates</del> <sup>1636</sup>   |                              |                               |
| <del>At the CAISO's direction, PTO(s) to prepare non-binding cost estimates and schedule for the direct assignment facilities and network upgrades identified in the power flow and short circuit duty analyses.</del> <sup>1637</sup> | <del>7</del> <sup>1638</sup> | <del>40</del> <sup>1639</sup> |
| <b>Finalizing Report</b> <sup>1640</sup>   |                              |                               |
| <del>At the CAISO's direction, PTO(s) to prepare draft report for impacts in their service territory.</del> <sup>1641</sup>  | <del>5</del> <sup>1642</sup> | <del>45</del> <sup>1643</sup> |
| <del>CAISO compiles all results into a draft report that covers grid impacts.</del> <sup>1644</sup>  | <del>5</del> <sup>1645</sup> | <del>50</del> <sup>1646</sup> |
| <del>PTO(s) reviews CAISO integrated report and provides comments to CAISO.</del> <sup>1647</sup>  | <del>4</del> <sup>1648</sup> | <del>54</del> <sup>1649</sup> |
| <del>CAISO incorporates PTO(s) comments. If PTO(s') comments conflict with CAISO conclusions, then CAISO and PTO must coordinate to resolve conflicts. Any remaining conflicts must be noted in final report.</del> <sup>1650</sup>    | <del>6</del> <sup>1651</sup> | <del>60</del> <sup>1652</sup> |
| <del>CAISO provides final CAISO approved report to IC, impacted PTOs, and any applicable Affected Systems. (Milestone)</del> <sup>1653</sup>   | <del>9</del> <sup>1654</sup> | <del>9</del> <sup>1655</sup>  |

### **Interconnection System Impact Study Process**<sup>1656</sup>

- ~~1. Prior to beginning the ISIS process as outlined in this Attachment A, the CAISO will notify the PTOs of potential seams issues and discuss the nature of the concerns with the PTOs. Where the CAISO determines that there is a reasonable expectation that the new Large Generating Facility to be interconnected in one PTO area may impact system performance in other PTO areas within the CAISO Controlled Grid that does not comply with the applicable planning standards, the CAISO will conduct or cause to be performed the ISIS Load Flow, Post Transient and Stability analyses, as appropriate, to assess the extent of the impact on the grid and evaluate mitigation solutions. Applicable planning standards include FERC approved CAISO Planning Standards, as may be amended from time to time, and the NERC/WECC Planning Standards, as may be amended from time to time. Further, there may be circumstances where information, including available studies, is not sufficient for the CAISO to make a reasonable engineering determination whether the new Large Generating Facility to be interconnected in one PTO area could cause system performance in other PTO areas (i.e. within the CAISO Controlled Grid) that does not comply with the applicable planning standards and, in such circumstances, the CAISO may nonetheless conduct or cause to be performed the ISIS Load Flow, Post Transient and Stability analyses to make such a determination.~~<sup>1657</sup>
- ~~2. At the CAISO's direction, the PTO develops a draft ISIS study plan and determines if available technical data is sufficient to complete ISIS.~~<sup>1658</sup>
- ~~3. PTO submits draft study plan to CAISO for review, direction and approval within seven (7) BD of CAISO tendering Interconnection Feasibility Study report to IC.~~<sup>1659</sup>
- ~~4. CAISO and PTO coordinate to finalize study plan within three (3) BD. CAISO approves the study plan.~~<sup>1660</sup>
- ~~5. CAISO tenders a signed ISISA to IC with final study plan included in Attachment A, within three (3) BD.~~<sup>1661</sup>

6. Upon receipt of executed study agreement, CAISO forwards any additional Attachment A, LGIP Appendix 1 data to PTO(s) within one (1) BD.<sup>1662</sup>
7. If the data provided by IC is insufficient to perform the study, PTO notifies CAISO within two (2) BD of CAISO receipt of the executed study agreement, and the CAISO notifies the IC within two (2) BD (total of five (5) BD per LGIP Section 7.2) to correct any deficiencies within ten (10) BD of the IR will be deemed withdrawn, triggering LGIP Section 3.8.<sup>1663</sup>
8. PTO must participate in study review meeting; date to be agreeable to PTO and within ten (10) BD of CAISO providing study report to IC (LGIP Section 7.5).<sup>1664</sup>
9. CAISO to confer with PTO as to the need for a re-study. CAISO makes the final determination subject to dispute resolution procedures.<sup>1665</sup>

### Interconnection System Impact Study Timeline<sup>1666</sup>

| <u>Line</u> <sup>1667</sup> | <b>Standard System Impact<sup>1668</sup> Initial (Phase I) Cluster<sup>1669</sup> Study Load Flow/Post Transient/Stability Process<sup>1670</sup></b>  | <b>Typical Calendar Days</b>                 | <b>Typical Cumulative Timeline<sup>1671</sup> (Days)<sup>1672</sup></b> |
|-----------------------------|--|--|---|
| <u>1</u> <sup>1674</sup>    | At the CAISO's direction, PTO(s) develop draft Base Case(s) <b>CAISO and PTOs develop initial Generating Facility groups for initial Dispatch assumptions and cost allocation purposes (except for thermal overload mitigation)</b> . <sup>1675, 1676, 1677</sup>  | 0 <sup>1678</sup> <u>7</u> <sup>1679</sup>   | 0 <sup>1680</sup> <u>1-7</u> <sup>1681</sup>                            |
| <u>2</u> <sup>1682</sup>    | PTO(s) <sup>1683</sup> <b>PTOs<sup>1684</sup> develop(s) draft Base Case(s)<sup>1685</sup> Cases, each representing all Generating Facilities in the queue cluster,</b> <sup>1687</sup> and deliver(s) <sup>1688</sup> to CAISO. <sup>1689</sup>   | 14 <sup>1690</sup> <u>21</u> <sup>1691</sup> | 14 <sup>1692</sup> <u>1-21</u> <sup>1693</sup>                          |
| <u>3</u> <sup>1694</sup>    | CAISO reviews Base Case(s) <sup>1695</sup> <b>PTO develops preferred<sup>1696</sup> and provides direction to PTO<sup>1697</sup> alternative, if applicable, direct interconnection plans, including the need for an Interconnection Grid Substation (IGS).</b> <sup>1698</sup>  | 7 <sup>1699</sup> <u>25</u> <sup>1700</sup>  | 24 <sup>1701</sup> <u>22-46</u> <sup>1702</sup>                         |
| <u>4</u> <sup>1703</sup>    | At the CAISO's direction, <sup>1704</sup> PTO develops <b>draft contingency lists.</b> <sup>1705, 1706</sup>   | <u>25</u> <sup>1707</sup>                    | <u>22-46</u> <sup>1708</sup>  |
| <u>5</u> <sup>1709</sup>    | PTO incorporates CAISO's directions into <b>CAISO reviews and approves<sup>1710</sup> Base Cases and direct interconnection plans and merges them together, as needed.</b> <sup>1711, 1712</sup><br>CAISO approves Base Case(s) <sup>1713</sup> <b>CAISO updates summer peak Base Cases to reflect withdrawn projects from previous queue cluster study. PTOs update off-peak Base Cases.</b> <sup>1714</sup><br>CAISO reviews and approves contingency lists <b>PTO needs time to consider CAISO proposed</b> | 7 <sup>1716</sup> <u>21</u> <sup>1717</sup>  | 28 <sup>1718</sup> <u>47-67</u> <sup>1719</sup>                         |



|   |  |   |   |
|---|--|---|---|
|   | <u>changes.</u> <sup>1715</sup>  |   |   |
| <u>6</u> <sup>1720</sup>  | <b><u>CAISO provides Deliverability Assessment results identifying constrained facilities, using summer peak Base Cases, and prepares results summary and may propose mitigation plans for PTO review.</u></b> <sup>1721</sup>   | <u>21</u> <sup>1722</sup>                           | <u>68-88</u> <sup>1723</sup>  |
| <u>7</u> <sup>1724</sup>  | At the CAISO's direction, the PTO may perform <sup>1725</sup> <b><u>performs</u></b> <sup>1726</sup> the ISIS <sup>1727</sup> <b><u>off-peak</u></b> <sup>1728</sup> Load Flow, <b><u>and summer peak and off-peak</u></b> <sup>1729</sup> Post Transient and Stability analyses & prepare <sup>1730</sup> <b><u>and identifies</u></b> <sup>1731</sup> mitigation solutions, as appropriate, <sup>1732</sup> and submits draft study results to CAISO for review and direction* <sup>1733</sup> . | 21  | <u>49</u> <sup>1734</sup> <del><u>68-</u></del><br><u>88</u> <sup>1735</sup>  |
| *Pursuant to the terms of item 1 above: where the CAISO performs the ISIS Load Flow, Post Transient and Stability analyses to determine grid impacts and evaluate mitigation solutions, the potentially impacted PTOs may, as part of the review process, perform activities to adequately review or validate Load Flow, Post Transient and Stability Analysis to assess CAISO results and recommend alternative solutions. (In the case of this election, "PTOs" should be substituted for "PTO" for remainder of ISIS process.) <sup>1736</sup> |  |   |   |
| <u>8</u> <sup>1737</sup>  | PTO develops <b><u>mitigation plans for summer peak and off-peak</u></b> <sup>1738</sup> or supplements CAISO proposed mitigation plans and/or develops alternative <sup>1739</sup> mitigation plans for consideration, as appropriate, and submits to CAISO for review and direction  | <u>14</u> <sup>1740</sup> <u>21</u> <sup>1741</sup> | <u>63</u> <sup>1742</sup> <del><u>89-</u></del><br><u>109</u> <sup>1743</sup> |
| <u>9</u> <sup>1744</sup>  | <b><u>CAISO retests Deliverability Assessment results with proposed Delivery Network Upgrades and withdrawn projects from previous cluster study removed. PTO reviews and comments on retest results.</u></b> <sup>1745</sup>  | <u>14</u> <sup>1746</sup>                           | <u>110-123</u> <sup>1747</sup>  |
| <u>10</u> <sup>1748</sup>   | <b><u>CAISO develops shift factors for cost allocation purposes of all Network Upgrades associated with mitigating thermal overloads.</u></b> <sup>1749</sup>  | <u>7</u> <sup>1750</sup>                            | <u>124-130</u> <sup>1751</sup>  |
| <b>Short Circuit Duty (concurrent with the LF/PT/S)</b>   |  |   |   |
| <u>11</u> <sup>1752</sup>   | CAISO to coordinate <sup>1753</sup> <b><u>coordinates</u></b> <sup>1754</sup> with other potentially affected facility owners <sup>1755</sup>  | n/a   | n/a   |
| <u>12</u> <sup>1759</sup>   | CAISO directs PTO to develop Base Case and run short circuit analysis <sup>1760</sup>  | 21  | <u>24</u> <sup>1761</sup> <del><u>46-</u></del><br><u>66</u> <sup>1762</sup>  |
| <u>13</u> <sup>1763</sup>   | PTO to perform <sup>1764</sup> <b><u>performs</u></b> <sup>1765</sup> facilities review, <b><u>(Note: possibly for feedback into the power flow studies and PTO mitigation plans.)</u></b> <sup>1766</sup>   | <u>35</u> <sup>1767</sup> <u>28</u> <sup>1768</sup> | <u>56</u> <sup>1769</sup> <del><u>67-</u></del><br><u>94</u> <sup>1770</sup>  |
| <u>14</u> <sup>1771</sup>   | PTO to prepare <sup>1772</sup> <b><u>prepares</u></b> <sup>1773</sup> draft study results and submits to the CAISO for review and direction, <sup>1774</sup>   | <u>7</u> <sup>1775</sup> <u>28</u> <sup>1776</sup>  | <u>63</u> <sup>1777</sup> <del><u>95-</u></del><br><u>123</u> <sup>1778</sup> |
| <b>Facility cost estimates and schedules</b>  |  |   |   |
| <u>15</u> <sup>1779</sup>   | At the CAISO's <sup>1780</sup> direction, PTO(s) to  | 20  | <u>83</u> <sup>1786</sup> <del><u>124-</u></del>                              |

<sup>2</sup> In accordance with the WECC Short Circuit Duty Procedure<sup>1756</sup>

<sup>1</sup> **In accordance with the WECC Short Circuit Duty Procedure**<sup>1758</sup>

|   |  |                           |  |
|---|--|---------------------------|--|
| 9   | prepare <sup>1781</sup> <b>prepares</b> <sup>1782</sup> cost estimates and schedules for the direct assignment facilities and network upgrades <sup>1783</sup> <b>Network Upgrades</b> <sup>1784</sup> identified in the ISIS <sup>1785</sup> power flow, short circuit duty, post transient, and stability studies. |                           | <b>143</b> <sup>1787</sup>                                   |
| <b>Final Report</b>   |  |                           |  |
| <b>16</b> <sup>1788</sup><br>8  | At the CAISO's direction, PTO(s) prepares draft report for impacts in their <sup>1789</sup> <b>its</b> <sup>1790</sup> service territory.  | 7                         | 90 <sup>1791</sup> <b>144-</b><br><b>150</b> <sup>1792</sup> |
| <b>17</b> <sup>1793</sup><br>3  | <b><u>CAISO compiles all results into a draft report that covers grid impacts, as appropriate. CAISO reviews integrated draft report and submits comments, recommendations and direction to the PTO.</u></b> <sup>1794</sup>   | <b>9</b> <sup>1795</sup>  | <b>151-159</b> <sup>1796</sup>                               |
| <b>18</b> <sup>1797</sup><br>7  | <b><u>PTO incorporates CAISO's directions, conclusions and recommendations. If CAISO conclusions and recommendations conflict with PTO conclusions, then CAISO and PTO must coordinate to resolve conflicts. Any remaining conflicts must be noted in the final report.</u></b> <sup>1798</sup>                      | <b>14</b> <sup>1799</sup> | <b>160-173</b> <sup>1800</sup>                               |
| <b>19</b> <sup>1801</sup><br>1  | <b><u>PTO submits final draft report to the CAISO. The CAISO will finalize the report and tender the CAISO approved report to the ICs.</u></b> <sup>1802</sup>   |                           |  |
| <b>Final Study Report</b> <sup>1803</sup>   |  |                           |  |
| <b>20</b> <sup>1804</sup><br>4  | <b><u>CAISO provides final approved report to ICs, PTO, and any applicable Affected Systems.</u></b> <sup>1805</sup>   | <b>7</b> <sup>1806</sup>  | <b>174-180</b> <sup>1807</sup>                               |
| CAISO compiles all results into a draft report that covers grid impacts, as appropriate. CAISO reviews integrated draft report and submits comments, recommendations and direction to the PTO <sup>1808</sup>   |  | <b>9</b> <sup>1809</sup>  | <b>99</b> <sup>1810</sup>                                    |
| PTO incorporates CAISO's directions, conclusions and recommendations. If CAISO conclusions and recommendations conflict with PTO conclusions then CAISO and PTO must coordinate to resolve conflicts. Any remaining conflicts must be noted in the final report. <sup>1811</sup>  |  | <b>14</b> <sup>1812</sup> | <b>113</b> <sup>1813</sup>                                   |
| PTO submits final draft report less the deliverability results to the CAISO. The CAISO will finalize the report and tender the CAISO approved report to the IC after incorporating Deliverability Assessment results. <sup>1814</sup>   |  |                           |  |
| CAISO Deliverability Assessment (concurrent with other studies) As part of the Deliverability Assessment process pursuant to LGIP Section 3.3.3, the CAISO may also perform studies pursuant to LGIP Section 3.3.2 to determine potential operating limitations on the generator due to constraints under a variety of system conditions. <sup>1815</sup> |  |                           |  |
| PTO provides GE PSLF compatible change files for all project changes since last Deliverability Assessment, including subject LGIP project. <sup>1816</sup>  |  | <b>14</b> <sup>1817</sup> | <b>14</b> <sup>1818</sup>                                    |
| CAISO incorporates project changes into Deliverability Assessment Base Case. <sup>1819</sup>  |  | <b>7</b> <sup>1820</sup>  | <b>21</b> <sup>1821</sup>                                    |
| CAISO provides Deliverability Assessment & prepares results summary. <sup>1822</sup>  |  | <b>14</b> <sup>1823</sup> | <b>35</b> <sup>1824</sup>                                    |

|  |                    |                     |
|--|--------------------|---------------------|
| CAISO provides initial Deliverability Assessment results with no upgrades and upgrades necessary for full deliverability <sup>1825</sup>   | 44 <sup>1826</sup> | 49 <sup>1827</sup>  |
| CAISO reviews Load Flow, post transient, and stability analysis mitigation options. (The timing of this action should be in sync with completion of Load Flow study results) <sup>1828</sup>   | 44 <sup>1829</sup> | 60 <sup>1830</sup>  |
| CAISO has the opportunity to revise Delivery Network Upgrades necessary for full deliverability, based on optimization with LF results. <sup>1831</sup>  | 7 <sup>1832</sup>  | 67 <sup>1833</sup>  |
| At the CAISO's direction, PTO to provide deliverability related upgrade costs and schedules, as appropriate. (This action should occur when PTO is performing cost analysis for Load Flow and Short Circuit Duty upgrades) <sup>1834</sup> | 46 <sup>1835</sup> | 83 <sup>1836</sup>  |
| CAISO drafts Deliverability Assessment results. <sup>1837</sup>  | 7 <sup>1838</sup>  | 90 <sup>1839</sup>  |
| PTO reviews/comments on Deliverability Assessment results. <sup>1840</sup>   | 42 <sup>1841</sup> | 102 <sup>1842</sup> |
| CAISO incorporates PTO comments on the Deliverability Assessment results, as appropriate. Any remaining conflicts must be noted in final report. <sup>1843</sup>   | 44 <sup>1844</sup> | 113 <sup>1845</sup> |
| <b>Final Study Report</b> <sup>1846</sup>  |                    |                     |
| CAISO provides final approved report to IC, PTO, and any applicable affected systems. <sup>1847</sup>  | 7 <sup>1848</sup>  | 120 <sup>1849</sup> |

**Interconnection Facilities<sup>1850</sup> Phase II Interconnection<sup>1851</sup> Study Process\*\***

\*\*All Interconnection Facilities<sup>1852</sup> Studies will be under the direction and oversight of, and approval by, the CAISO and may involve more than one PTO.

1. ~~Within five (5) BD of the ISIS study review meeting, the PTO develops draft Interconnection Facilities Study plan and submits to CAISO for review and approval.~~<sup>1853</sup>
2. ~~CAISO submits executed Interconnection Facilities Study Agreement to IC within five (5) BD.~~<sup>1854</sup>
3. ~~Upon receipt of executed Interconnection Facilities Study Agreement from IC, CAISO submits to PTO technical data provided by IC within one (1) BD.~~<sup>1855</sup>
4. ~~If the data provided by IC is insufficient to perform the study, PTO notifies CAISO within three (3) BD and the CAISO notifies the IC within two (2) BD (total of five (5) BD per LGIP) that IR is deemed withdrawn and the reason for the withdrawal. IC has fifteen (15) BD to cure withdrawal notice (LGIP goes directly to withdrawal pursuant to LGIP Section 3.8).~~<sup>1856</sup>
5. ~~PTO conducts Interconnection Facilities Study and submits draft report to CAISO.~~<sup>1857</sup>
6. ~~CAISO forwards draft report to IC for comments.~~<sup>1858</sup>
7. ~~CAISO forwards IC comments or notice of no comments to PTO within one (1) BD of receipt.~~<sup>1859</sup>
8. ~~PTO incorporates IC comments within five (5) BDs and submits updated draft to CAISO for review and comment.~~<sup>1860</sup>

9. CAISO reviews and comments, provides recommendations and direction on PTO draft Interconnection Facilities Study report within two (2) BD.<sup>1861</sup>
10. PTO reviews/incorporates CAISO directions within five (5) BD and sends revised report to CAISO.<sup>1862</sup>
11. CAISO issues final report to IC within two (2) BD (total of fifteen (15) BD). If PTO comments conflict with CAISO recommendations and conclusions, CAISO and PTO must coordinate to resolve conflicts. Any remaining conflicts must be noted in the final report.<sup>1863</sup>
12. CAISO, PTO(s), and IC meet within ten (10) BDs from issuance of draft report.<sup>1864</sup>
13. CAISO and PTO collaborate on any re-study issues. CAISO will direct any necessary re-studies and/or progress to LGIA process.<sup>1865</sup>

| <u>Line</u> <sup>1</sup><br><sup>866</sup> | <u>Standard Project Refinement and Facilities Study</u> <sup>1867</sup>   | <u>Typical Calendar Days</u> <sup>1868</sup> | <u>Timeline (Days)</u> <sup>1869</sup> |
|--|---|--|--|
| <u>21</u> <sup>187</sup><br><sub>0</sub>   | <u>PTOs update Base Cases from Phase I Interconnection Study line 5 to remove projects that have withdrawn.</u> <sup>1871</sup>   | <u>30</u> <sup>1872</sup>                    | <u>1-30</u> <sup>1873</sup>            |
| <u>22</u> <sup>187</sup><br><sub>4</sub>   | <u>CAISO reviews and approves Base Cases.</u> <sup>1875</sup>   |  |  |
| <u>23</u> <sup>187</sup><br><sub>6</sub>   | <u>CAISO and PTOs update studies performed in Phase I lines 6-14 using Base Cases from line 22. Additional alternatives may be considered that address future generation development potential, meet load serving capability, and economic benefit objectives, and phased development and option value of transmission projects to address uncertainty.</u> <sup>1877</sup>   | <u>120</u> <sup>1878</sup>                   | <u>31-150</u> <sup>1879</sup>          |
| <u>23.1</u> <sup>1</sup><br><sub>880</sub> | <u>Projects from line 23 requiring CPUC or CAISO Governing Board approval may need to go through the Transmission Planning Process stakeholder process. After completing the stakeholder review process, these projects would proceed through the activities described in lines 24 through 32. Projects not requiring CPUC or CAISO Governing Board approval, or that have already gone through a stakeholder process, would proceed immediately to the activities described in lines 24 through 32. (See Appendix C of the CAISO's proposal for the generator interconnection process reform.)</u> <sup>1881</sup> |  |  |
| <u>24</u> <sup>188</sup><br><sub>2</sub>   | <u>PTOs develop draft off-peak and summer peak operating year Base Cases as appropriate where each case includes all Generating Facilities in Phase II Interconnection Study having the same operating date and deliver to CAISO.</u> <sup>1883</sup>   | <u>30</u> <sup>1884</sup>                    | <u>151-180*</u> <sup>1885</sup>        |
| <u>25</u> <sup>188</sup><br><sub>6</sub>   | <u>CAISO reviews and approves cases from line 24.</u> <sup>1887</sup>   |  |  |
| <u>26</u> <sup>188</sup>                   | <u>At the CAISO's direction, the PTOs perform operational studies using cases from line 25 to</u>   | <u>45</u> <sup>1890</sup>                    | <u>181-</u>                            |

|  |  |                                  |  |
|--|--|----------------------------------|--|
| 8  | <b><u>determine Network Upgrade requirements for each study year and identify any special operational requirements to connect projects in the year of study.</u></b> <sup>1889</sup>   |                                  | <b><u>225*</u></b> <sup>1891</sup>                       |
| <b><u>27</u></b> <sup>189</sup><br>2                       | <b><u>At the CAISO's direction, the PTOs perform additional operational studies to identify the optimal approach for building out the overall plan of service on a segmented (i.e. building block) basis acknowledging that portions of the overall plan of service may be staged in segments over time.</u></b> <sup>1893</sup> | <b><u>30</u></b> <sup>1894</sup> | <b><u>226-</u></b><br><b><u>255*</u></b> <sup>1895</sup> |
| <b><u>Final Plan of Service Report</u></b> <sup>1896</sup> |  |                                  |  |
| <b><u>28</u></b> <sup>189</sup><br>7                       | <b><u>At the CAISO's direction, PTO(s) prepares draft plan of service report.</u></b> <sup>1898</sup>  | <b><u>7</u></b> <sup>1899</sup>  | <b><u>256-</u></b><br><b><u>262*</u></b> <sup>1900</sup> |
| <b><u>29</u></b> <sup>190</sup><br>1                       | <b><u>CAISO reviews draft plan of service report and submits comments, recommendations and direction to the PTO.</u></b> <sup>1902</sup>   | <b><u>9</u></b> <sup>1903</sup>  | <b><u>263-</u></b><br><b><u>271*</u></b> <sup>1904</sup> |
| <b><u>30</u></b> <sup>190</sup><br>5                       | <b><u>PTO incorporates CAISO directions, conclusions and recommendations. If CAISO conclusions and recommendations conflict with PTO conclusions, then CAISO and PTO must coordinate to resolve conflicts. Any remaining conflicts must be noted in the final report.</u></b> <sup>1906</sup>                                    | <b><u>14</u></b> <sup>1907</sup> | <b><u>272-</u></b><br><b><u>285*</u></b> <sup>1908</sup> |
| <b><u>31</u></b> <sup>190</sup><br>9                       | <b><u>PTO submits final draft report to the CAISO. The CAISO will finalize the report.</u></b> <sup>1910</sup>   |                                  |  |
| <b><u>Facility Costs and Schedules</u></b> <sup>1911</sup> |  |                                  |  |
| <b><u>32</u></b> <sup>191</sup><br>2                       | <b><u>At the CAISO's direction, PTO(s) prepares detailed cost estimates and schedules for the direct assignment facilities and Network Upgrades identified in the overall plan of service and including individual segments.</u></b> <sup>1913</sup>   | <b><u>75</u></b> <sup>1914</sup> | <b><u>256-</u></b><br><b><u>330*</u></b> <sup>1915</sup> |

\* **For projects going through the Transmission Planning Process as described in Line 23.1, the activities in lines 24 through 32 may be delayed until the Network Upgrade plan is approved through the Transmission Planning Process. However, the subsequent cluster study would proceed on schedule based on the plan of service from line 23.**<sup>1916</sup>

**ATTACHMENT B**  
**CONTACTS FOR NOTICES**

**[Section 4.15]**

**California ISO**

Manager, Transmission Engineering  
151 Blue Ravine Road  
Folsom, CA 95630  
Phone: 916.351.2104  
Fax: 916.351.2264

**[NAME OF PTO]**

[Address of PTO]

\* \* \*



**Attachment D3 – Blacklines**<sup>1</sup>

**Generation Interconnection Process Reform Amendment Filing**<sup>2</sup>

**4<sup>th</sup> Replacement MRTU Tariff**<sup>3</sup>



\*\*\*<sup>4</sup>

**CAISO TARIFF APPENDIX ~~V~~<sup>5</sup> Z<sup>6</sup>**

**Standard<sup>7</sup> Large Generator Interconnection Agreement  
for Interconnection Requests in a Queue Cluster Window<sup>8</sup>**

**STANDARD<sup>10</sup> LARGE GENERATOR INTERCONNECTION AGREEMENT (LGIA)**  
**[INTERCONNECTION CUSTOMER]**  
**[PARTICIPATING TO]**  
**CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

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**STANDARD<sup>278</sup> LARGE GENERATOR INTERCONNECTION AGREEMENT**

**[INTERCONNECTION CUSTOMER]**

**[PARTICIPATING TO]**

**CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

**THIS STANDARD<sup>279</sup> LARGE GENERATOR INTERCONNECTION AGREEMENT** ("LGIA") is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and among \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ ("Interconnection Customer" with a Large Generating Facility), \_\_\_\_\_, a corporation organized and existing under the laws of the State of California ("**Participating TO**"), and **California Independent System Operator Corporation**, a California nonprofit public benefit corporation organized and existing under the laws of the State of California ("CAISO"). Interconnection Customer, Participating TO, and CAISO each may be referred to as a "Party" or collectively as the "Parties."

**RECITALS**

**WHEREAS**, CAISO exercises Operational Control over the CAISO Controlled Grid; and

**WHEREAS**, the Participating TO owns, operates, and maintains the Participating TO's Transmission System; and

**WHEREAS**, Interconnection Customer intends to own, lease and/or control and operate the Generating Facility identified as a Large Generating Facility in Appendix C to this LGIA; and

**WHEREAS**, Interconnection Customer, Participating TO, and CAISO have agreed to enter into this LGIA for the purpose of interconnecting the Large Generating Facility with the Participating TO's Transmission System;

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein, it is agreed:

When used in this LGIA, terms with initial capitalization that are not defined in Article 1 shall have the meanings specified in the Article in which they are used.

**ARTICLE 1. DEFINITIONS**

**Adverse System Impact** shall mean the negative effects due to technical or operational limits on conductors or equipment being exceeded that may compromise the safety and reliability of the electric system.

**Affected System** shall mean an electric system other than the CAISO Controlled Grid that may be affected by the proposed interconnection, including the Participating TO's electric system that is not part of the CAISO Controlled Grid.

**Affiliate** shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Council** shall mean the Western Electricity Coordinating Council or its successor.

**Applicable Reliability Standards** shall mean the requirements and guidelines of NERC, the Applicable Reliability Council, and the Balancing Authority Area of the Participating TO's Transmission System to which the Generating Facility is directly interconnected.

**Balancing Authority** shall mean the responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.

**Balancing Authority Area** shall mean the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.

**Base Case** shall mean the base case power flow, short circuit, and stability data bases used for the Interconnection Studies.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of this LGIA.

**Breaching Party** shall mean a Party that is in Breach of this LGIA.

**Business Day** shall mean Monday through Friday, excluding federal holidays and the day after Thanksgiving Day.

**CAISO Controlled Grid** shall mean the system of transmission lines and associated facilities of the parties to the Transmission Control Agreement that have been placed under the CAISO's Operational Control.<sup>280</sup>

**CAISO Tariff** shall mean the CAISO's tariff, as filed with FERC, and as amended or supplemented from time to time, or any successor tariff.<sup>281</sup>

**Calendar Day** shall mean any day including Saturday, Sunday or a federal holiday.

**Commercial Operation** shall mean the status of an Electric Generating Unit or project phase<sup>282</sup> at a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

**Commercial Operation Date** of an Electric Generating Unit or project phase<sup>283</sup> shall mean the date on which the Electric Generating Unit or project phase<sup>284</sup> at the Generating Facility commences Commercial Operation as agreed to by the applicable Participating TO, the CAISO,<sup>285</sup> and the Interconnection Customer pursuant to Appendix E to this LGIA, and in accordance with the implementation plan agreed to by the Participating TO and the CAISO for multiple individual Electric Generating Units or project phases at a Generating Facility where an Interconnection

**Customer intends to establish separate Commercial Operation Dates for those Electric Generating Units or project phases**<sup>286</sup>.

**Confidential Information** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, subject to Article 22.1.2.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of this LGIA.

**Distribution System** shall mean those non-CAISO-controlled transmission and distribution facilities owned by the Participating TO.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to the Participating TO's Distribution System. Distribution Upgrades do not include Interconnection Facilities.

**Effective Date** shall mean the date on which this LGIA becomes effective upon execution by the<sup>287</sup> all<sup>288</sup> Parties subject to acceptance by FERC, or if filed unexecuted, upon the date specified by FERC.

**Electric Generating Unit** shall mean an individual electric generator and its associated plant and apparatus whose electrical output is capable of being separately identified and metered.

**Emergency Condition** shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the CAISO, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the CAISO Controlled Grid or the electric systems of others to which the CAISO Controlled Grid is directly connected; (3) that, in the case of the Participating TO, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Participating TO's Transmission System, Participating TO's Interconnection Facilities, Distribution System, or the electric systems of others to which the Participating TO's electric system is directly connected; or (4) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions; provided, that Interconnection Customer is not obligated by this LGIA to possess black start capability.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**Federal Power Act** shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a et seq.

**FERC** shall mean the Federal Energy Regulatory Commission or its successor.

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**Generating Facility** shall mean the Interconnection Customer's Electric Generating Unit(s) used for the production of electricity identified in the Interconnection Customer's Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Generating Facility Capacity** shall mean the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices.

**Good Utility Practice** shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be any one of a number of the optimum practices, methods, or acts to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** shall mean any federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, CAISO, Participating TO, or any Affiliate thereof.

**Hazardous Substances** shall mean any chemicals, materials or substances defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “hazardous constituents,” “restricted hazardous materials,” “extremely hazardous substances,” “toxic substances,” “radioactive substances,” “contaminants,” “pollutants,” “toxic pollutants” or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**Initial Synchronization Date** shall mean the date upon which an Electric Generating Unit is initially synchronized and upon which Trial Operation begins.

**In-Service Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Participating TO’s Interconnection Facilities to obtain back feed power.

**Interconnection Customer’s Interconnection Facilities** shall mean all facilities and equipment, as identified in Appendix A of this LGIA, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Participating TO’s Transmission System. Interconnection Customer’s Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Participating TO’s Interconnection Facilities and the Interconnection Customer’s Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Participating TO’s Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Facilities Study** shall mean the study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), or a third party consultant for the Interconnection Customer to determine<sup>289</sup> a list of facilities (including the Participating TO’s Interconnection Facilities, Network Upgrades,<sup>290</sup> and Distribution<sup>291</sup> Upgrades), the cost of those facilities, and the time required to interconnect the Generating Facility<sup>292</sup> with the Participating TO’s Transmission System.<sup>293</sup>

**Interconnection Facilities Study Agreement** shall mean the agreement between the Interconnection Customer and the CAISO for conducting the Interconnection Facilities Study.<sup>294</sup>

**Interconnection Feasibility Study** shall mean the preliminary evaluation conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), or a third party consultant for the Interconnection Customer of the system impact and cost of interconnecting the Generating Facility to the Participating TO's Transmission System.<sup>295</sup>

**Interconnection Financial Security** shall have the meaning assigned to it in Section 1.2 of the LGIP.<sup>296</sup>

**Interconnection Handbook** shall mean a handbook, developed by the Participating TO and posted on the Participating TO's web site or otherwise made available by the Participating TO, describing technical and operational requirements for wholesale generators and loads connected to the Participating TO's portion of the CAISO Controlled Grid, as such handbook may be modified or superseded from time to time. Participating TO's standards contained in the Interconnection Handbook shall be deemed consistent with Good Utility Practice and Applicable Reliability Standards. In the event of a conflict between the terms of this LGIA and the terms of the Participating TO's Interconnection Handbook, the terms in this LGIA shall apply.

**Interconnection Request** shall mean a request, in the form of Appendix 1 to the Standard Large Generator Interconnection Procedures, in accordance with the CAISO Tariff.<sup>297</sup>

**Interconnection Service** shall mean the service provided by the Participating TO and CAISO associated with interconnecting the Interconnection Customer's Generating Facility to the Participating TO's Transmission System and enabling the CAISO Controlled Grid to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of this LGIA, the Participating TO's Transmission Owner Tariff, and the CAISO Tariff.

**Interconnection Study** shall mean any<sup>298</sup> either<sup>299</sup> of the following studies: the Phase I<sup>300</sup> Interconnection Feasibility<sup>301</sup> Study,<sup>302</sup> or<sup>303</sup> the Phase II<sup>304</sup> Interconnection System Impact Study, and the Interconnection Facilities<sup>305</sup> Study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), or a third party consultant for the Interconnection Customer,<sup>306</sup> pursuant to the Standard<sup>307</sup> Large Generator Interconnection Procedures.<sup>308</sup> **Interconnection System Impact Study**<sup>309</sup> shall mean the engineering study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s),<sup>310</sup> or a third party consultant for the Interconnection Customer,<sup>311</sup> that evaluates the impact of the proposed interconnection on the safety and reliability of the Participating TO's Transmission System and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility<sup>312</sup> were interconnected without<sup>313</sup> project modifications or system modifications, focusing on the Adverse System Impacts identified in the Interconnection Feasibility Study, or to study<sup>314</sup> potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Standard<sup>315</sup> Large Generator Interconnection Procedures.<sup>316</sup>

**IRS** shall mean the Internal Revenue Service.

**CAISO Controlled Grid** shall mean the system of transmission lines and associated facilities of the parties to the Transmission Control Agreement that have been placed under the CAISO's Operational Control.<sup>317</sup>

**CAISO Tariff** shall mean the CAISO's tariff, as filed with FERC, and as amended or supplemented from time to time, or any successor tariff.<sup>318</sup>

**Large Generating Facility** shall mean a Generating Facility having a Generating Facility Capacity of more than 20 MW.

**Large Generator Interconnection Procedures (LGIP)** shall mean the CAISO protocol that sets forth the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that is included in <sup>319</sup> **CAISO Tariff Appendix Y.** <sup>320</sup>

**Large Generator Interconnection Study Process Agreement** shall mean the agreement **between the Interconnection Customer and the CAISO for the conduct of the Interconnection Studies.** <sup>321</sup>

**Loss** shall mean any and all damages, losses, and claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties.

**Material Modification** shall mean those modifications that have a material impact on the cost or timing of any Interconnection Request or any other valid interconnection request with a later queue priority date.

**Metering Equipment** shall mean all metering equipment installed or to be installed for measuring the output of the Generating Facility pursuant to this LGIA at the metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

**NERC** shall mean the North American Electric Reliability Council or its successor organization.

**Network Upgrades** shall be Participating TO's Delivery Network Upgrades and Participating TO's Reliability Network Upgrades.

**Operational Control** shall mean the rights of the CAISO under the Transmission Control Agreement and the CAISO Tariff to direct the parties to the Transmission Control Agreement how to operate their transmission lines and facilities and other electric plant affecting the reliability of those lines and facilities for the purpose of affording comparable non-discriminatory transmission access and meeting applicable reliability criteria.

**Participating TO's Delivery Network Upgrades** shall mean the additions, modifications, and upgrades to the Participating TO's Transmission System at or beyond the Point of Interconnection, other than Reliability Network Upgrades, identified in the Interconnection Studies, as identified in Appendix A, to relieve constraints on the CAISO Controlled Grid.

**Participating TO's Interconnection Facilities** shall mean all facilities and equipment owned, controlled or operated by the Participating TO from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to this LGIA, including any modifications, additions or upgrades to such facilities and equipment. Participating TO's Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Participating TO's Reliability Network Upgrades** shall mean the additions, modifications, and upgrades to the Participating TO's Transmission System at or beyond the Point of Interconnection, identified in the Interconnection Studies, as identified in Appendix A, necessary to interconnect the Large Generating Facility safely and reliably to the Participating TO's Transmission System, which would not have been necessary but for the interconnection of the Large Generating Facility, including additions, modifications, and upgrades necessary to remedy short circuit or stability problems resulting from the interconnection of the Large Generating Facility to the Participating TO's Transmission System. Participating TO's Reliability Network Upgrades also include, consistent with Applicable Reliability

**Standards and Applicable Reliability**<sup>322</sup> Council practice, the Participating TO's facilities necessary to mitigate any adverse impact the Large Generating Facility's interconnection may have on a path's Applicable Reliability Council rating. **Participating TO's Reliability Network Upgrades do not include any Participating TO's Delivery Network Upgrades**<sup>323</sup>.

**Participating TO's Transmission System** shall mean the facilities owned and operated by the Participating TO and that have been placed under the CAISO's Operational Control, which facilities form part of the CAISO Controlled Grid.

**Party or Parties** shall mean the Participating TO, CAISO, Interconnection Customer or the applicable combination of the above.

**Phase I Interconnection Study**<sup>324</sup> shall mean the engineering study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s),<sup>325</sup> that evaluates the impact of the proposed interconnection on the safety and reliability of the Participating TO's Transmission System and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility<sup>326</sup> (ies)<sup>327</sup> were interconnected without<sup>328</sup> **identified project modifications or system modifications, as provided in the On-Peak Deliverability Assessment (as defined in the CAISO Tariff), and other**<sup>329</sup> potential impacts, including but not limited to those identified in the Scoping Meeting as described in the<sup>330</sup> Large Generator Interconnection Procedures.<sup>331</sup> **The study will also identify the approximate total costs, based on per unit costs, of mitigating these impacts, along with an equitable allocation of those costs to Interconnection Customers for their individual Generating Facilities.**<sup>332</sup>

**Phase II Interconnection Study** shall mean an engineering and operational study conducted or caused to be performed by the CAISO once per calendar year, in coordination with the applicable Participating TO(s), to determine the Point of Interconnection and<sup>333</sup> a list of facilities (including the Participating TO's Interconnection Facilities, Network Upgrades,<sup>334</sup> **Distribution Upgrades, and Stand Alone Network**<sup>335</sup> Upgrades), the cost of those facilities, and the time required to interconnect the Generating Facility<sup>336</sup> (ies) with the Participating TO's Transmission System.<sup>337</sup>

**Point of Change of Ownership** shall mean the point, as set forth in Appendix A to this LGIA, where the Interconnection Customer's Interconnection Facilities connect to the Participating TO's Interconnection Facilities.

**Point of Interconnection** shall mean the point, as set forth in Appendix A to this LGIA, where the Interconnection Facilities connect to the Participating TO's Transmission System.

**Qualifying Facility** shall mean a qualifying cogeneration facility or qualifying small power production facility, as defined in the Code of Federal Regulations, Title 18, Part 292 (18 C.F.R. §292).<sup>338</sup>

**QF PGA** shall mean a Qualifying Facility Participating Generator Agreement specifying the special provisions for the operating relationship between a Qualifying Facility and the CAISO, a pro forma version of which is set forth in Appendix B.3 of the CAISO Tariff.

**Qualifying Facility** shall mean a qualifying cogeneration facility or qualifying small power production facility, as defined in the Code of Federal Regulations, Title 18, Part 292 (18 C.F.R. §292).<sup>339</sup>

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under this LGIA, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.



**Scoping Meeting** shall mean the meeting among representatives of the Interconnection Customer, the Participating TO(s), other Affected Systems, and the CAISO conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

**Stand Alone Network Upgrades** shall mean Network Upgrades that the Interconnection Customer may construct without affecting day-to-day operations of the CAISO Controlled Grid or Affected Systems during their construction. The Participating TO, the CAISO, and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to this LGIA.

~~**Standard**~~<sup>340</sup> ~~**Large Generator Interconnection Procedures (LGIP)**~~ shall mean the CAISO protocol that sets forth the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that is included in<sup>341</sup> the CAISO Tariff.<sup>342</sup>

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, that protects (1) the Participating TO's Transmission System, Participating TO's Interconnection Facilities, CAISO Controlled Grid, and Affected Systems from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the CAISO Controlled Grid, Participating TO's Interconnection Facilities, and Affected Systems or on other delivery systems or other generating systems to which the CAISO Controlled Grid is directly connected.

**Transmission Control Agreement** shall mean CAISO FERC Electric Tariff No. 7.

**Trial Operation** shall mean the period during which the Interconnection Customer is engaged in on-site test operations and commissioning of an Electric Generating Unit prior to Commercial Operation.

## ARTICLE 2. EFFECTIVE DATE, TERM AND TERMINATION

**2.1 Effective Date.**<sup>343</sup> This LGIA shall become effective upon execution by the<sup>344</sup> all<sup>345</sup> Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by FERC. The CAISO and Participating TO shall promptly file this LGIA with FERC upon execution in accordance with Article 3.1, if required.

**2.2 Term of Agreement.**<sup>346</sup> Subject to the provisions of Article 2.3, this LGIA shall remain in effect for a period of \_\_\_\_ years from the Effective Date (Term Specified in Individual Agreements to be ten (10) years or such other longer period as the Interconnection Customer may request) and shall be automatically renewed for each successive one-year period thereafter.

**2.3 Termination Procedures.**<sup>347</sup>

**2.3.1 Written Notice.**<sup>348</sup> This LGIA may be terminated by the Interconnection Customer after giving the CAISO and the Participating TO ninety (90) Calendar Days advance written notice, or by the CAISO and the Participating TO notifying FERC after the Generating Facility permanently ceases Commercial Operation.

**2.3.2 Default.**<sup>349</sup> A Party may terminate this LGIA in accordance with Article 17.

**2.3.3 Suspension of Work.**<sup>350</sup> This LGIA may be deemed terminated in accordance with Article 5.16.

**2.3.4** Notwithstanding Articles 2.3.1, 2.3.2, and 2.3.3, no termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this LGIA (if applicable)<sup>351</sup>, which notice has been accepted for filing by FERC<sup>352</sup>, and the Interconnection Customer has fulfilled its termination cost obligations under Article 2.4.<sup>353</sup>

**2.4** **Termination Costs.** If<sup>354</sup> Immediately upon the other Parties' receipt of a notice of the termination of<sup>355</sup> this LGIA~~terminates~~<sup>356</sup> pursuant to Article 2.3 above, the Interconnection Customer shall pay<sup>357</sup> CAISO and the Participating TO will determine the total cost responsibility of the Interconnection Customer. If, as of the date of the other Parties' receipt of the notice of termination, the Interconnection Customer has not already paid its share of Network Upgrade costs, as set forth in Appendix G to this LGIA, the Participating TO will liquidate the Interconnection Customer's Interconnection Financial Security associated with its cost responsibility for Network Upgrades, in accordance with Section 9.4 of the LGIP.<sup>358</sup>

The Interconnection Customer will also be responsible for<sup>359</sup> all costs incurred or irrevocably committed to be incurred in association with the construction of the Participating TO's<sup>360</sup> Interconnection Customer's interconnection Facilities<sup>361</sup> (including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment) and other such<sup>363</sup> expenses, including any Network Upgrades and<sup>364</sup> Distribution Upgrades for which the Participating TO or CAISO has incurred expenses or has irrevocably committed to incur expenses and has not been reimbursed by the Interconnection Customer, as of the date of the other Parties' receipt of the notice of termination, subject to the limitations set forth in this Article 2.4. Nothing in this Article 2.4 shall limit the Parties' rights under Article 17. If, as of the date of the other Parties' receipt of the notice of termination, the Interconnection Customer has not already reimbursed the Participating TO and the CAISO for costs incurred to construct the Participating TO's Interconnection Facilities, the Participating TO will liquidate the Interconnection Customer's Interconnection Financial Security associated with the construction of the Participating TO's Interconnection Facilities, in accordance with Section 9.4 of the LGIP. If the amount of the Interconnection Financial Security liquidated by the Participating TO under this Article 2.4 is insufficient to compensate the CAISO and the Participating TO for actual costs associated with the construction of the Participating TO's Interconnection Facilities contemplated in this Article, any additional amounts will be the responsibility of the Interconnection Customer, subject to the provisions of Section 9.4 of the LGIP. Any such additional amounts due from the Interconnection Customer beyond the amounts covered by its Interconnection Financial Security will be due to the Participating TO immediately upon termination of this LGIA in accordance with Section 9.4 of the LGIP.<sup>365</sup>

If the amount of the Interconnection Financial Security exceeds the Interconnection Customer's cost responsibility under Section 9.4 of the LGIP, any excess amount will be released to the Interconnection Customer in accordance with Section 9.4 of the LGIP.<sup>366</sup>

**2.4.1** Notwithstanding the foregoing, in the event of termination by a Party, all Parties shall use commercially Reasonable Efforts to mitigate the costs, damages and charges arising as a consequence of termination. With respect to any portion of the Participating TO's Interconnection Facilities that have not yet been constructed or installed, the Participating TO shall to the extent possible and with the Interconnection Customer's authorization cancel any pending orders of, or return, any materials or equipment for, or contracts for construction of, such facilities; provided that in the event the Interconnection Customer elects not to authorize such cancellation, the Interconnection Customer shall assume all payment obligations with respect to such materials, equipment, and contracts, and the

Participating TO shall deliver such material and equipment, and, if necessary, assign such contracts, to the Interconnection Customer as soon as practicable, at the Interconnection Customer's expense. To the extent that the Interconnection Customer has already paid the Participating TO for any or all such costs of materials or equipment not taken by the Interconnection Customer, the Participating TO shall promptly refund such amounts to the Interconnection Customer, less any costs, including penalties, incurred by the Participating TO to cancel any pending orders of or return such materials, equipment, or contracts.

- 2.4.2** The Participating TO may, at its option, retain any portion of such materials, equipment, or facilities that the Interconnection Customer chooses not to accept delivery of, in which case the Participating TO shall be responsible for all costs associated with procuring such materials, equipment, or facilities.
- 2.4.3** With respect to any portion of the Interconnection Facilities, and any other facilities already installed or constructed pursuant to the terms of this LGIA, Interconnection Customer shall be responsible for all costs associated with the removal, relocation or other disposition or retirement of such materials, equipment, or facilities.
- 2.5** **Disconnection.**<sup>367</sup> Upon termination of this LGIA, the Parties will take all appropriate steps to disconnect the Large Generating Facility from the Participating TO's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this LGIA or such non-terminating Party otherwise is responsible for these costs under this LGIA.
- 2.6** **Survival.**<sup>368</sup> This LGIA shall continue in effect after termination to the extent necessary to provide for final billings and payments and for costs incurred hereunder, including billings and payments pursuant to this LGIA; to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this LGIA was in effect; and to permit each Party to have access to the lands of the other Parties pursuant to this LGIA or other applicable agreements, to disconnect, remove or salvage its own facilities and equipment.

### **ARTICLE 3. REGULATORY FILINGS AND CAISO TARIFF COMPLIANCE**

- 3.1** **Filing.**<sup>369</sup> The Participating TO and the CAISO shall file this LGIA (and any amendment hereto) with the appropriate Governmental Authority(ies), if required. The Interconnection Customer may request that any information so provided be subject to the confidentiality provisions of Article 22. If the Interconnection Customer has executed this LGIA, or any amendment thereto, the Interconnection Customer shall reasonably cooperate with the Participating TO and CAISO with respect to such filing and to provide any information reasonably requested by the Participating TO or CAISO needed to comply with applicable regulatory requirements.
- 3.2** **Agreement Subject to CAISO Tariff.**<sup>370</sup> The Interconnection Customer will comply with all applicable provisions of the CAISO Tariff, including the LGIP.
- 3.3** **Relationship Between this LGIA and the CAISO Tariff.** With regard to rights and obligations between the Participating TO and the Interconnection Customer, if and to the extent a matter is specifically addressed by a provision of this LGIA (including any appendices, schedules or other attachments to this LGIA), the provisions of this LGIA shall govern. If and to the extent a provision of this LGIA is inconsistent with the CAISO Tariff and dictates rights and obligations between the CAISO and the Participating TO or the CAISO and the Interconnection Customer, the CAISO Tariff shall govern.

- 3.4 Relationship Between this LGIA and the QF PGA.** With regard to the rights and obligations of a Qualifying Facility that has entered into a QF PGA with the CAISO and has entered into this LGIA, if and to the extent a matter is specifically addressed by a provision of the QF PGA that is inconsistent with this LGIA, the terms of the QF PGA shall govern.

#### **ARTICLE 4. SCOPE OF SERVICE**

- 4.1 Interconnection Service.** Interconnection Service allows the Interconnection Customer to connect the Large Generating Facility to the Participating TO's Transmission System and be eligible to deliver the Large Generating Facility's output using the available capacity of the CAISO Controlled Grid. To the extent the Interconnection Customer wants to receive Interconnection Service, the Participating TO shall construct facilities identified in Appendices A and C that the Participating TO is responsible to construct.

Interconnection Service does not necessarily provide the Interconnection Customer with the capability to physically deliver the output of its Large Generating Facility to any particular load on the CAISO Controlled Grid without incurring congestion costs. In the event of transmission constraints on the CAISO Controlled Grid, the Interconnection Customer's Large Generating Facility shall be subject to the applicable congestion management procedures in the CAISO Tariff in the same manner as all other resources.

- 4.2 Provision of Service.**<sup>371</sup> The Participating TO and the CAISO shall provide Interconnection Service for the Large Generating Facility.
- 4.3 Performance Standards.**<sup>372</sup> Each Party shall perform all of its obligations under this LGIA in accordance with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice, and to the extent a Party is required or prevented or limited in taking any action by such regulations and standards, such Party shall not be deemed to be in Breach of this LGIA for its compliance therewith. If such Party is the CAISO or Participating TO, then that Party shall amend the LGIA and submit the amendment to FERC for approval.
- 4.4 No Transmission Service.**<sup>373</sup> The execution of this LGIA does not constitute a request for, nor the provision of, any transmission service under the CAISO Tariff, and does not convey any right to deliver electricity to any specific customer or point of delivery.
- 4.5 Interconnection Customer Provided Services.**<sup>374</sup> The services provided by Interconnection Customer under this LGIA are set forth in Article 9.6 and Article 13.5.1. Interconnection Customer shall be paid for such services in accordance with Article 11.6.

#### **ARTICLE 5. INTERCONNECTION FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION**

Interconnection Facilities, Network Upgrades, and Distribution Upgrades shall be studied, designed, and constructed pursuant to Good Utility Practice. Such studies, design and construction shall be based on the assumed accuracy and completeness of all technical information received by the Participating TO and the CAISO from the Interconnection Customer associated with interconnecting the Large Generating Facility.

- 5.1 Options.**<sup>375</sup> Unless otherwise mutually agreed among the Parties, the Interconnection Customer shall select the In-Service Date, Initial Synchronization Date, and Commercial Operation Date; and either Standard Option or Alternate Option set forth below for completion of the Participating TO's Interconnection Facilities and Network Upgrades as set forth in Appendix A, Interconnection Facilities, Network Upgrades, and Distribution Upgrades, and such dates and selected option shall be set forth in Appendix B, Milestones.

**5.1.1 Standard Option.**<sup>376</sup> The Participating TO shall design, procure, and construct the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, using Reasonable Efforts to complete the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades by the dates set forth in Appendix B, Milestones. The Participating TO shall not be required to undertake any action which is inconsistent with its standard safety practices, its material and equipment specifications, its design criteria and construction procedures, its labor agreements, and Applicable Laws and Regulations. In the event the Participating TO reasonably expects that it will not be able to complete the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades by the specified dates, the Participating TO shall promptly provide written notice to the Interconnection Customer and the CAISO and shall undertake Reasonable Efforts to meet the earliest dates thereafter.

**5.1.2 Alternate Option.**<sup>377</sup> If the dates designated by the Interconnection Customer are acceptable to the Participating TO, the Participating TO shall so notify the Interconnection Customer within thirty (30) Calendar Days, and shall assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities by the designated dates.

If the Participating TO subsequently fails to complete the Participating TO's Interconnection Facilities by the In-Service Date, to the extent necessary to provide back feed power; or fails to complete Network Upgrades by the Initial Synchronization Date to the extent necessary to allow for Trial Operation at full power output, unless other arrangements are made by the Parties for such Trial Operation; or fails to complete the Network Upgrades by the Commercial Operation Date, as such dates are reflected in Appendix B, Milestones; the Participating TO shall pay the Interconnection Customer liquidated damages in accordance with Article 5.3, Liquidated Damages, provided, however, the dates designated by the Interconnection Customer shall be extended day for day for each day that the CAISO refuses to grant clearances to install equipment.

**5.1.3 Option to Build.**<sup>378</sup> If the dates designated by the Interconnection Customer are not acceptable to the Participating TO, the Participating TO shall so notify the Interconnection Customer within thirty (30) Calendar Days, and unless the Parties agree otherwise, the Interconnection Customer shall have the option to assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades. If the Interconnection Customer elects to exercise its option to assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, it shall so notify the Participating TO within thirty (30) Calendar Days of receipt of the Participating TO's notification that the designated dates are not acceptable to the Participating TO. The Participating TO, CAISO, and Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Appendix A to this LGIA. Except for Stand Alone Network Upgrades, the Interconnection Customer shall have no right to construct Network Upgrades under this option.

**5.1.4 Negotiated Option.**<sup>379</sup> If the Interconnection Customer elects not to exercise its option under Article 5.1.3, Option to Build, the Interconnection Customer shall so notify the Participating TO within thirty (30) Calendar Days of receipt of the Participating TO's notification that the designated dates are not acceptable to the Participating TO, and the Parties shall in good faith attempt to negotiate terms and conditions (including revision of the specified dates and liquidated damages, the provision of incentives or the procurement and construction of a portion of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades by the Interconnection Customer) pursuant

to which the Participating TO is responsible for the design, procurement and construction of the Participating TO's Interconnection Facilities and Network Upgrades. If the Parties are unable to reach agreement on such terms and conditions, the Participating TO shall assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Network Upgrades pursuant to Article 5.1.1, Standard Option.

**5.2 General Conditions Applicable to Option to Build.** If the Interconnection Customer assumes responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades,

(1) the Interconnection Customer shall engineer, procure equipment, and construct the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by the Participating TO;

(2) The Interconnection Customer's engineering, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law to which the Participating TO would be subject in the engineering, procurement or construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

(3) the Participating TO shall review, and the Interconnection Customer shall obtain the Participating TO's approval of, the engineering design, equipment acceptance tests, and the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, which approval shall not be unreasonably withheld, and the CAISO may, at its option, review the engineering design, equipment acceptance tests, and the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

(4) prior to commencement of construction, the Interconnection Customer shall provide to the Participating TO, with a copy to the CAISO for informational purposes, a schedule for construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, and shall promptly respond to requests for information from the Participating TO;

(5) at any time during construction, the Participating TO shall have the right to gain unrestricted access to the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;

(6) at any time during construction, should any phase of the engineering, equipment procurement, or construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by the Participating TO, the Interconnection Customer shall be obligated to remedy deficiencies in that portion of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

(7) the Interconnection Customer shall indemnify the CAISO and Participating TO for claims arising from the Interconnection Customer's construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to Article 18.1 Indemnity;

(8) The Interconnection Customer shall transfer control of the Participating TO's Interconnection Facilities to the Participating TO and shall transfer Operational Control of Stand Alone Network Upgrades to the CAISO;

(9) Unless the Parties otherwise agree, the Interconnection Customer shall transfer ownership of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the Participating TO. As soon as reasonably practicable, but within twelve months after completion of the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, the Interconnection Customer shall provide an invoice of the final cost of the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the Participating TO, which invoice shall set forth such costs in sufficient detail to enable the Participating TO to reflect the proper costs of such facilities in its transmission rate base and to identify the investment upon which refunds will be provided;

(10) the Participating TO shall accept for operation and maintenance the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2; and

(11) The Interconnection Customer's engineering, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of the "Option to Build" conditions set forth in Appendix C. Interconnection Customer shall deliver to the Participating TO "as-built" drawings, information, and any other documents that are reasonably required by the Participating TO to assure that the Interconnection Facilities and Stand-Alone Network Upgrades are built to the standards and specifications required by the Participating TO.

**5.3 Liquidated Damages.**<sup>380</sup> The actual damages to the Interconnection Customer, in the event the Participating TO's Interconnection Facilities or Network Upgrades are not completed by the dates designated by the Interconnection Customer and accepted by the Participating TO pursuant to subparagraphs 5.1.2 or 5.1.4, above, may include Interconnection Customer's fixed operation and maintenance costs and lost opportunity costs. Such actual damages are uncertain and impossible to determine at this time. Because of such uncertainty, any liquidated damages paid by the Participating TO to the Interconnection Customer in the event that the Participating TO does not complete any portion of the Participating TO's Interconnection Facilities or Network Upgrades by the applicable dates, shall be an amount equal to ½ of 1 percent per day of the actual cost of the Participating TO's Interconnection Facilities and Network Upgrades, in the aggregate, for which the Participating TO has assumed responsibility to design, procure and construct.

However, in no event shall the total liquidated damages exceed 20 percent of the actual cost of the Participating TO's Interconnection Facilities and Network Upgrades for which the Participating TO has assumed responsibility to design, procure, and construct. The foregoing payments will be made by the Participating TO to the Interconnection Customer as just compensation for the damages caused to the Interconnection Customer, which actual damages are uncertain and impossible to determine at this time, and as reasonable liquidated damages, but not as a penalty or a method to secure performance of this LGIA. Liquidated damages, when the Parties agree to them, are the exclusive remedy for the Participating TO's failure to meet its schedule.

No liquidated damages shall be paid to the Interconnection Customer if: (1) the Interconnection Customer is not ready to commence use of the Participating TO's Interconnection Facilities or Network Upgrades to take the delivery of power for the Electric Generating Unit's Trial Operation or to export power from the Electric Generating Unit on the specified dates, unless the Interconnection Customer would have been able to commence use of the Participating TO's Interconnection Facilities or Network Upgrades to take the delivery of power for Electric Generating Unit's Trial Operation or to export power from the Electric Generating Unit, but for the Participating TO's delay; (2) the Participating TO's failure to meet the specified dates is the result of the action or inaction of the Interconnection Customer or any other interconnection customer who has entered into an interconnection agreement with the CAISO and/or Participating TO, action or inaction by the CAISO, or any cause beyond the Participating TO's reasonable control

or reasonable ability to cure; (3) the Interconnection Customer has assumed responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades; or (4) the Parties have otherwise agreed.

In no event shall the CAISO have any responsibility or liability to the Interconnection Customer for liquidated damages pursuant to the provisions of this Article 5.3.

**5.4 Power System Stabilizers.**<sup>381</sup> The Interconnection Customer shall procure, install, maintain and operate Power System Stabilizers in accordance with Applicable Reliability Standards,<sup>382</sup> the guidelines and procedures established by the Applicable Reliability Council,<sup>383</sup> and ~~in accordance with~~<sup>384</sup> the provisions of Section 4.6.5.1 of the CAISO Tariff. The CAISO reserves the right to establish reasonable minimum acceptable settings for any installed Power System Stabilizers, subject to the design and operating limitations of the Large Generating Facility. If the Large Generating Facility's Power System Stabilizers are removed from service or not capable of automatic operation, the Interconnection Customer shall immediately notify the CAISO and the Participating TO and restore the Power System Stabilizers to operation as soon as possible ~~and in accordance with the Reliability Management System Agreement in Appendix G~~<sup>385</sup>. The CAISO shall have the right to order the reduction in output or disconnection of the Large Generating Facility if the reliability of the CAISO Controlled Grid would be adversely affected as a result of improperly tuned Power System Stabilizers. The requirements of this Article 5.4 shall not apply to wind generators of the induction type.

**5.5 Equipment Procurement.**<sup>386</sup> If responsibility for construction of the Participating TO's Interconnection Facilities or Network Upgrades is to be borne by the Participating TO, then the Participating TO shall commence design of the Participating TO's Interconnection Facilities or Network Upgrades and procure necessary equipment as soon as practicable after all of the following conditions are satisfied, unless the Parties otherwise agree in writing:

**5.5.1** The CAISO, in coordination with the applicable Participating TO(s), has completed the Phase II<sup>387</sup> ~~Interconnection Facilities~~<sup>388</sup> Study pursuant to the Large Generator<sup>389</sup> Interconnection Facilities Study Process<sup>390</sup> Agreement;

**5.5.2** The Participating TO has received written authorization to proceed with design and procurement from the Interconnection Customer by the date specified in Appendix B, Milestones; and

**5.5.3** The Interconnection Customer has provided security to the Participating TO in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.

**5.6 Construction Commencement.**<sup>391</sup> The Participating TO shall commence construction of the Participating TO's Interconnection Facilities and Network Upgrades for which it is responsible as soon as practicable after the following additional conditions are satisfied:

**5.6.1** Approval of the appropriate Governmental Authority has been obtained for any facilities requiring regulatory approval;

**5.6.2** Necessary real property rights and rights-of-way have been obtained, to the extent required for the construction of a discrete aspect of the Participating TO's Interconnection Facilities and Network Upgrades;

**5.6.3** The Participating TO has received written authorization to proceed with construction from the Interconnection Customer by the date specified in Appendix B, Milestones; and



- 5.6.4** The Interconnection Customer has provided payment and security to the Participating TO in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.
- 5.7 Work Progress.**<sup>392</sup> The Parties will keep each other advised periodically as to the progress of their respective design, procurement and construction efforts. Any Party may, at any time, request a progress report from another Party. If, at any time, the Interconnection Customer determines that the completion of the Participating TO's Interconnection Facilities will not be required until after the specified In-Service Date, the Interconnection Customer will provide written notice to the Participating TO and CAISO of such later date upon which the completion of the Participating TO's Interconnection Facilities will be required.
- 5.8 Information Exchange.**<sup>393</sup> As soon as reasonably practicable after the Effective Date, the Parties shall exchange information regarding the design and compatibility of the Interconnection Customer's Interconnection Facilities and Participating TO's Interconnection Facilities and compatibility of the Interconnection Facilities with the Participating TO's Transmission System, and shall work diligently and in good faith to make any necessary design changes.
- 5.9 Limited Operation.**<sup>394</sup> If any of the Participating TO's Interconnection Facilities or Network Upgrades are not reasonably expected to be completed prior to the Commercial Operation Date of the Electric Generating Unit, the Participating TO and/or CAISO, as applicable, shall, upon the request and at the expense of the Interconnection Customer, perform operating studies on a timely basis to determine the extent to which the Electric Generating Unit and the Interconnection Customer's Interconnection Facilities may operate prior to the completion of the Participating TO's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and this LGIA. The Participating TO and CAISO shall permit Interconnection Customer to operate the Electric Generating Unit and the Interconnection Customer's Interconnection Facilities in accordance with the results of such studies.
- 5.10 Interconnection Customer's Interconnection Facilities.**<sup>395</sup> The Interconnection Customer shall, at its expense, design, procure, construct, own and install the Interconnection Customer's Interconnection Facilities, as set forth in Appendix A.
- 5.10.1 Large Generating Facility and Interconnection Customer's Interconnection Facilities Specifications.**<sup>396</sup> The<sup>397</sup> **In addition to the Interconnection Customer's responsibility to submit technical data with its Interconnection Request as required by Section 3.5.1 of the LGIP, the**<sup>398</sup> Interconnection Customer shall submit initial<sup>399</sup> **all remaining necessary**<sup>400</sup> specifications for the Interconnection Customer's Interconnection Facilities and Large Generating Facility, including System Protection Facilities, to the Participating TO and the CAISO at least one hundred eighty (180) Calendar Days prior to the Initial Synchronization Date; and final specifications for review and comment at least ninety (90) Calendar Days prior to the Initial Synchronization Date. The Participating TO and the CAISO shall review such specifications pursuant to this LGIA and the LGIP to ensure that the Interconnection Customer's Interconnection Facilities and Large Generating Facility are compatible with the technical specifications, operational control, safety requirements, and any other applicable requirements of the Participating TO and the CAISO and comment on such specifications within thirty (30) Calendar Days of the Interconnection Customer's submission. All specifications provided hereunder shall be deemed confidential.
- 5.10.2 Participating TO's and CAISO's Review.**<sup>401</sup> The Participating TO's and the CAISO's review of the Interconnection Customer's final specifications shall not be construed as confirming, endorsing, or providing a warranty as to the design, fitness, safety, durability or reliability of the Large Generating Facility, or the Interconnection Customer's

Interconnection Facilities. Interconnection Customer shall make such changes to the Interconnection Customer's Interconnection Facilities as may reasonably be required by the Participating TO or the CAISO, in accordance with Good Utility Practice, to ensure that the Interconnection Customer's Interconnection Facilities are compatible with the technical specifications, Operational Control, and safety requirements of the Participating TO or the CAISO.

**5.10.3 Interconnection Customer's Interconnection Facilities Construction.**<sup>402</sup> The Interconnection Customer's Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Participating TO and Interconnection Customer agree on another mutually acceptable deadline, the Interconnection Customer shall deliver to the Participating TO and CAISO "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities and the Electric Generating Unit(s), such as: a one-line diagram, a site plan showing the Large Generating Facility and the Interconnection Customer's Interconnection Facilities, plan and elevation drawings showing the layout of the Interconnection Customer's Interconnection Facilities, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with the Interconnection Customer's step-up transformers, the facilities connecting the Large Generating Facility to the step-up transformers and the Interconnection Customer's Interconnection Facilities, and the impedances (determined by factory tests) for the associated step-up transformers and the Electric Generating Units. The Interconnection Customer shall provide the Participating TO and the CAISO specifications for the excitation system, automatic voltage regulator, Large Generating Facility control and protection settings, transformer tap settings, and communications, if applicable. Any deviations from the relay settings, machine specifications, and other specifications originally submitted by the Interconnection Customer shall be assessed by the Participating TO and the CAISO pursuant to the appropriate provisions of this LGIA and the LGIP.

**5.10.4 Interconnection Customer to Meet Requirements of the Participating TO's Interconnection Handbook.**<sup>403</sup> The Interconnection Customer shall comply with the Participating TO's Interconnection Handbook.

**5.11 Participating TO's Interconnection Facilities Construction.**<sup>404</sup> The Participating TO's Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Upon request, within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Participating TO and Interconnection Customer agree on another mutually acceptable deadline, the Participating TO shall deliver to the Interconnection Customer and the CAISO the following "as-built" drawings, information and documents for the Participating TO's Interconnection Facilities [include appropriate drawings and relay diagrams].

The Participating TO will obtain control for operating and maintenance purposes of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades upon completion of such facilities. Pursuant to Article 5.2, the CAISO will obtain Operational Control of the Stand Alone Network Upgrades prior to the Commercial Operation Date.

**5.12 Access Rights.**<sup>405</sup> Upon reasonable notice and supervision by a Party, and subject to any required or necessary regulatory approvals, a Party ("Granting Party") shall furnish at no cost to the other Party ("Access Party") any rights of use, licenses, rights of way and easements with respect to lands owned or controlled by the Granting Party, its agents (if allowed under the applicable agency agreement), or any Affiliate, that are necessary to enable the Access Party to obtain ingress and egress to construct, operate, maintain, repair, test (or witness testing), inspect, replace or remove facilities and equipment to: (i) interconnect the Large Generating Facility with

the Participating TO's Transmission System; (ii) operate and maintain the Large Generating Facility, the Interconnection Facilities and the Participating TO's Transmission System; and (iii) disconnect or remove the Access Party's facilities and equipment upon termination of this LGIA. In exercising such licenses, rights of way and easements, the Access Party shall not unreasonably disrupt or interfere with normal operation of the Granting Party's business and shall adhere to the safety rules and procedures established in advance, as may be changed from time to time, by the Granting Party and provided to the Access Party.

- 5.13 Lands of Other Property Owners.**<sup>406</sup> If any part of the Participating TO's Interconnection Facilities and/or Network Upgrades are to be installed on property owned by persons other than the Interconnection Customer or Participating TO, the Participating TO shall at the Interconnection Customer's expense use efforts, similar in nature and extent to those that it typically undertakes on its own behalf or on behalf of its Affiliates, including use of its eminent domain authority, and to the extent consistent with state law, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove the Participating TO's Interconnection Facilities and/or Network Upgrades upon such property.
- 5.14 Permits.** Participating TO and Interconnection Customer shall cooperate with each other in good faith in obtaining all permits, licenses and authorization that are necessary to accomplish the interconnection in compliance with Applicable Laws and Regulations. With respect to this paragraph, the Participating TO shall provide permitting assistance to the Interconnection Customer comparable to that provided to the Participating TO's own, or an Affiliate's generation.
- 5.15 Early Construction of Base Case Facilities.** The Interconnection Customer may request the Participating TO to construct, and the Participating TO shall construct, using Reasonable Efforts to accommodate Interconnection Customer's In-Service Date, all or any portion of any Network Upgrades required for Interconnection Customer to be interconnected to the Participating TO's Transmission System which are included in the Base Case of the Interconnection Studies for the Interconnection Customer, and which also are required to be constructed for another interconnection customer, but where such construction is not scheduled to be completed in time to achieve Interconnection Customer's In-Service Date.
- 5.16 Suspension.** The Interconnection Customer reserves the right, upon written notice to the Participating TO and the CAISO, to suspend at any time all work associated with the construction and installation of the Participating TO's Interconnection Facilities, Network Upgrades, and/or Distribution Upgrades required under this LGIA, **other than Network Upgrades identified in the Phase II Interconnection Study as common to multiple Generating Facilities.**<sup>407</sup> with the condition that the Participating TO's electrical system and the CAISO Controlled Grid shall be left in a safe and reliable condition in accordance with Good Utility Practice and the Participating TO's safety and reliability criteria and the CAISO's Applicable Reliability Standards. In such event, the Interconnection Customer shall be responsible for all reasonable and necessary costs which the Participating TO (i) has incurred pursuant to this LGIA prior to the suspension and (ii) incurs in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Participating TO's electric system during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and labor contracts which the Participating TO cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, the Participating TO shall obtain Interconnection Customer's authorization to do so.

The Participating TO shall invoice the Interconnection Customer for such costs pursuant to Article 12 and shall use due diligence to minimize its costs. In the event Interconnection Customer suspends work required under this LGIA pursuant to this Article 5.16, and has not requested the Participating TO to recommence the work or has not itself recommenced work required under this

LGIA on or before the expiration of<sup>408</sup> **in time to ensure that the new projected Commercial Operation Date for the full Generating Facility Capacity of the Large Generating Facility is no more than**<sup>409</sup> three (3) years following commencement of such suspension<sup>410</sup> **from the Commercial Operation Date identified in Appendix B hereto**<sup>411</sup>, this LGIA shall be deemed terminated. The three-year<sup>412</sup> **and the Interconnection Customer's responsibility for costs will be determined in accordance with Section 2.4 of this LGIA. The suspension**<sup>413</sup> period shall begin on the date the suspension is requested, or the date of the written notice to the Participating TO and the CAISO, if no effective date is specified.

## **5.17 Taxes.**

**5.17.1 Interconnection Customer Payments Not Taxable.** The Parties intend that all payments or property transfers made by the Interconnection Customer to the Participating TO for the installation of the Participating TO's Interconnection Facilities and the Network Upgrades shall be non-taxable, either as contributions to capital, or as a refundable advance, in accordance with the Internal Revenue Code and any applicable state income tax laws and shall not be taxable as contributions in aid of construction or otherwise under the Internal Revenue Code and any applicable state income tax laws.

**5.17.2 Representations And Covenants.** In accordance with IRS Notice 2001-82 and IRS Notice 88-129, the Interconnection Customer represents and covenants that (i) ownership of the electricity generated at the Large Generating Facility will pass to another party prior to the transmission of the electricity on the CAISO Controlled Grid, (ii) for income tax purposes, the amount of any payments and the cost of any property transferred to the Participating TO for the Participating TO's Interconnection Facilities will be capitalized by the Interconnection Customer as an intangible asset and recovered using the straight-line method over a useful life of twenty (20) years, and (iii) any portion of the Participating TO's Interconnection Facilities that is a "dual-use intertie," within the meaning of IRS Notice 88-129, is reasonably expected to carry only a de minimis amount of electricity in the direction of the Large Generating Facility. For this purpose, "de minimis amount" means no more than 5 percent of the total power flows in both directions, calculated in accordance with the "5 percent test" set forth in IRS Notice 88-129. This is not intended to be an exclusive list of the relevant conditions that must be met to conform to IRS requirements for non-taxable treatment.

At the Participating TO's request, the Interconnection Customer shall provide the Participating TO with a report from an independent engineer confirming its representation in clause (iii), above. The Participating TO represents and covenants that the cost of the Participating TO's Interconnection Facilities paid for by the Interconnection Customer without the possibility of refund or credit will have no net effect on the base upon which rates are determined.

**5.17.3 Indemnification for the Cost Consequence of Current Tax Liability Imposed Upon the Participating TO.** Notwithstanding Article 5.17.1, the Interconnection Customer shall protect, indemnify and hold harmless the Participating TO from the cost consequences of any current tax liability imposed against the Participating TO as the result of payments or property transfers made by the Interconnection Customer to the Participating TO under this LGIA for Interconnection Facilities, as well as any interest and penalties, other than interest and penalties attributable to any delay caused by the Participating TO.

The Participating TO shall not include a gross-up for the cost consequences of any current tax liability in the amounts it charges the Interconnection Customer under this LGIA unless (i) the Participating TO has determined, in good faith, that the payments or property transfers made by the Interconnection Customer to the Participating TO should be reported as income subject to taxation or (ii) any Governmental Authority directs the

Participating TO to report payments or property as income subject to taxation; provided, however, that the Participating TO may require the Interconnection Customer to provide security for Interconnection Facilities, in a form reasonably acceptable to the Participating TO (such as a parental guarantee or a letter of credit), in an amount equal to the cost consequences of any current tax liability under this Article 5.17. The Interconnection Customer shall reimburse the Participating TO for such costs on a fully grossed-up basis, in accordance with Article 5.17.4, within thirty (30) Calendar Days of receiving written notification from the Participating TO of the amount due, including detail about how the amount was calculated.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten year testing period and the applicable statute of limitation, as it may be extended by the Participating TO upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event and the payment of any related indemnification obligations as contemplated by this Article 5.17.

**5.17.4 Tax Gross-Up Amount.** The Interconnection Customer's liability for the cost consequences of any current tax liability under this Article 5.17 shall be calculated on a fully grossed-up basis. Except as may otherwise be agreed to by the parties, this means that the Interconnection Customer will pay the Participating TO, in addition to the amount paid for the Interconnection Facilities and Network Upgrades, an amount equal to (1) the current taxes imposed on the Participating TO ("Current Taxes") on the excess of (a) the gross income realized by the Participating TO as a result of payments or property transfers made by the Interconnection Customer to the Participating TO under this LGIA (without regard to any payments under this Article 5.17) (the "Gross Income Amount") over (b) the present value of future tax deductions for depreciation that will be available as a result of such payments or property transfers (the "Present Value Depreciation Amount"), plus (2) an additional amount sufficient to permit the Participating TO to receive and retain, after the payment of all Current Taxes, an amount equal to the net amount described in clause (1).

For this purpose, (i) Current Taxes shall be computed based on the Participating TO's composite federal and state tax rates at the time the payments or property transfers are received and the Participating TO will be treated as being subject to tax at the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting the Participating TO's anticipated tax depreciation deductions as a result of such payments or property transfers by the Participating TO's current weighted average cost of capital. Thus, the formula for calculating the Interconnection Customer's liability to the Participating TO pursuant to this Article 5.17.4 can be expressed as follows:  $(\text{Current Tax Rate} \times (\text{Gross Income Amount} - \text{Present Value of Tax Depreciation})) / (1 - \text{Current Tax Rate})$ . Interconnection Customer's estimated tax liability in the event taxes are imposed shall be stated in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades.

**5.17.5 Private Letter Ruling or Change or Clarification of Law.**<sup>414</sup> At the Interconnection Customer's request and expense, the Participating TO shall file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by the Interconnection Customer to the Participating TO under this LGIA are subject to federal income taxation. The Interconnection Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of the Interconnection Customer's knowledge. The Participating TO and Interconnection Customer shall cooperate in good faith with respect to the submission of such request, provided, however, the Interconnection Customer and the Participating TO explicitly acknowledge (and nothing herein is intended to alter) Participating TO's obligation under law to certify that the facts presented in the ruling request are true, correct and complete.

The Participating TO shall keep the Interconnection Customer fully informed of the status of such request for a private letter ruling and shall execute either a privacy act waiver or a limited power of attorney, in a form acceptable to the IRS, that authorizes the Interconnection Customer to participate in all discussions with the IRS regarding such request for a private letter ruling. The Participating TO shall allow the Interconnection Customer to attend all meetings with IRS officials about the request and shall permit the Interconnection Customer to prepare the initial drafts of any follow-up letters in connection with the request.

**5.17.6 Subsequent Taxable Events.**<sup>415</sup> If, within 10 years from the date on which the relevant Participating TO's Interconnection Facilities are placed in service, (i) the Interconnection Customer Breaches the covenants contained in Article 5.17.2, (ii) a "disqualification event" occurs within the meaning of IRS Notice 88-129, or (iii) this LGIA terminates and the Participating TO retains ownership of the Interconnection Facilities and Network Upgrades, the Interconnection Customer shall pay a tax gross-up for the cost consequences of any current tax liability imposed on the Participating TO, calculated using the methodology described in Article 5.17.4 and in accordance with IRS Notice 90-60.

**5.17.7 Contests.**<sup>416</sup> In the event any Governmental Authority determines that the Participating TO's receipt of payments or property constitutes income that is subject to taxation, the Participating TO shall notify the Interconnection Customer, in writing, within thirty (30) Calendar Days of receiving notification of such determination by a Governmental Authority. Upon the timely written request by the Interconnection Customer and at the Interconnection Customer's sole expense, the Participating TO may appeal, protest, seek abatement of, or otherwise oppose such determination. Upon the Interconnection Customer's written request and sole expense, the Participating TO may file a claim for refund with respect to any taxes paid under this Article 5.17, whether or not it has received such a determination. The Participating TO reserve the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the selection of counsel and compromise or settlement of the claim, but the Participating TO shall keep the Interconnection Customer informed, shall consider in good faith suggestions from the Interconnection Customer about the conduct of the contest, and shall reasonably permit the Interconnection Customer or an Interconnection Customer representative to attend contest proceedings.

The Interconnection Customer shall pay to the Participating TO on a periodic basis, as invoiced by the Participating TO, the Participating TO's documented reasonable costs of prosecuting such appeal, protest, abatement or other contest, including any costs associated with obtaining the opinion of independent tax counsel described in this Article 5.17.7. The Participating TO may abandon any contest if the Interconnection Customer fails to provide payment to the Participating TO within thirty (30) Calendar Days of receiving such invoice.

At any time during the contest, the Participating TO may agree to a settlement either with the Interconnection Customer's consent or, if such consent is refused, after obtaining written advice from independent nationally-recognized tax counsel, selected by the Participating TO, but reasonably acceptable to the Interconnection Customer, that the proposed settlement represents a reasonable settlement given the hazards of litigation. The Interconnection Customer's obligation shall be based on the amount of the settlement agreed to by the Interconnection Customer, or if a higher amount, so much of the settlement that is supported by the written advice from nationally-recognized tax counsel selected under the terms of the preceding paragraph. The settlement amount shall be calculated on a fully grossed-up basis to cover any related cost consequences of

the current tax liability. The Participating TO may also settle any tax controversy without receiving the Interconnection Customer's consent or any such written advice; however, any such settlement will relieve the Interconnection Customer from any obligation to indemnify the Participating TO for the tax at issue in the contest (unless the failure to obtain written advice is attributable to the Interconnection Customer's unreasonable refusal to the appointment of independent tax counsel).

**5.17.8 Refund.** In the event that (a) a private letter ruling is issued to the Participating TO which holds that any amount paid or the value of any property transferred by the Interconnection Customer to the Participating TO under the terms of this LGIA is not subject to federal income taxation, (b) any legislative change or administrative announcement, notice, ruling or other determination makes it reasonably clear to the Participating TO in good faith that any amount paid or the value of any property transferred by the Interconnection Customer to the Participating TO under the terms of this LGIA is not taxable to the Participating TO, (c) any abatement, appeal, protest, or other contest results in a determination that any payments or transfers made by the Interconnection Customer to the Participating TO are not subject to federal income tax, or (d) if the Participating TO receives a refund from any taxing authority for any overpayment of tax attributable to any payment or property transfer made by the Interconnection Customer to the Participating TO pursuant to this LGIA, the Participating TO shall promptly refund to the Interconnection Customer the following:

(i) any payment made by Interconnection Customer under this Article 5.17 for taxes that is attributable to the amount determined to be non-taxable, together with interest thereon,

(ii) interest on any amounts paid by the Interconnection Customer to the Participating TO for such taxes which the Participating TO did not submit to the taxing authority, calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date payment was made by the Interconnection Customer to the date the Participating TO refunds such payment to the Interconnection Customer, and

(iii) with respect to any such taxes paid by the Participating TO, any refund or credit the Participating TO receives or to which it may be entitled from any Governmental Authority, interest (or that portion thereof attributable to the payment described in clause (i), above) owed to the Participating TO for such overpayment of taxes (including any reduction in interest otherwise payable by the Participating TO to any Governmental Authority resulting from an offset or credit); provided, however<sup>417</sup>, that the Participating TO will remit such amount promptly to the Interconnection Customer only after and to the extent that the Participating TO has received a tax refund, credit or offset from any Governmental Authority for any applicable overpayment of income tax related to the Participating TO's Interconnection Facilities.

The intent of this provision is to leave the Parties, to the extent practicable, in the event that no taxes are due with respect to any payment for Interconnection Facilities and Network Upgrades hereunder, in the same position they would have been in had no such tax payments been made.

**5.17.9 Taxes Other Than Income Taxes.**<sup>418</sup> Upon the timely request by the Interconnection Customer, and at the Interconnection Customer's sole expense, the CAISO or Participating TO may appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against the CAISO or Participating TO for which the Interconnection Customer may be required to reimburse

the CAISO or Participating TO under the terms of this LGIA. The Interconnection Customer shall pay to the Participating TO on a periodic basis, as invoiced by the Participating TO, the Participating TO's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. The Interconnection Customer, the CAISO, and the Participating TO shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by the Interconnection Customer to the CAISO or Participating TO for such taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, the Interconnection Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by the Participating TO.

**5.18 Tax Status.**<sup>419</sup> Each Party shall cooperate with the others to maintain the other Parties' tax status. Nothing in this LGIA is intended to adversely affect the CAISO's or any Participating TO's tax exempt status with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds.

**5.19 Modification.**<sup>420</sup>

**5.19.1 General.** The Interconnection Customer or the Participating TO may undertake modifications to its facilities, subject to the provisions of this LGIA and the CAISO Tariff. If a Party plans to undertake a modification that reasonably may be expected to affect the other Parties' facilities, that Party shall provide to the other Parties sufficient information regarding such modification so that the other Parties may evaluate the potential impact of such modification prior to commencement of the work. Such information shall be deemed to be confidential hereunder and shall include information concerning the timing of such modifications and whether such modifications are expected to interrupt the flow of electricity from the Large Generating Facility. The Party desiring to perform such work shall provide the relevant drawings, plans, and specifications to the other Parties at least ninety (90) Calendar Days in advance of the commencement of the work or such shorter period upon which the Parties may agree, which agreement shall not unreasonably be withheld, conditioned or delayed.

In the case of Large Generating Facility modifications that do not require the Interconnection Customer to submit an Interconnection Request, the CAISO or Participating TO shall provide, within thirty (30) Calendar Days (or such other time as the Parties may agree), an estimate of any additional modifications to the CAISO Controlled Grid, Participating TO's Interconnection Facilities, Network Upgrades or Distribution Upgrades necessitated by such Interconnection Customer modification and a good faith estimate of the costs thereof. The Participating TO and the CAISO shall determine if a Large Generating Facility modification is a Material Modification in accordance with the LGIP.

**5.19.2 Standards.** Any additions, modifications, or replacements made to a Party's facilities shall be designed, constructed and operated in accordance with this LGIA and Good Utility Practice.

**5.19.3 Modification Costs.** The Interconnection Customer shall not be directly assigned the costs of any additions, modifications, or replacements that the Participating TO makes to the Participating TO's Interconnection Facilities or the Participating TO's Transmission System to facilitate the interconnection of a third party to the Participating TO's Interconnection Facilities or the Participating TO's Transmission System, or to provide transmission service to a third party under the CAISO Tariff. The Interconnection Customer shall be responsible for the costs of any additions, modifications, or



replacements to the Interconnection Facilities that may be necessary to maintain or upgrade such Interconnection Facilities consistent with Applicable Laws and Regulations, Applicable Reliability Standards or Good Utility Practice.

## ARTICLE 6. TESTING AND INSPECTION

- 6.1 Pre-Commercial Operation Date Testing and Modifications.**<sup>421</sup> Prior to the Commercial Operation Date, the Participating TO shall test the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades and the Interconnection Customer shall test the Large Generating Facility and the Interconnection Customer's Interconnection Facilities to ensure their safe and reliable operation. Similar testing may be required after initial operation. Each Party shall make any modifications to its facilities that are found to be necessary as a result of such testing. The Interconnection Customer shall bear the cost of all such testing and modifications. The Interconnection Customer shall not commence initial parallel operation of an Electric Generating Unit with the Participating TO's Transmission System until the Participating TO provides prior written approval, which approval shall not be unreasonably withheld, for operation of such Electric Generating Unit. The Interconnection Customer shall generate test energy at the Large Generating Facility only if it has arranged for the delivery of such test energy.
- 6.2 Post-Commercial Operation Date Testing and Modifications.**<sup>422</sup> Each Party shall at its own expense perform routine inspection and testing of its facilities and equipment in accordance with Good Utility Practice as may be necessary to ensure the continued interconnection of the Large Generating Facility with the Participating TO's Transmission System in a safe and reliable manner. Each Party shall have the right, upon advance written notice, to require reasonable additional testing of the other Party's facilities, at the requesting Party's expense, as may be in accordance with Good Utility Practice.
- 6.3 Right to Observe Testing.**<sup>423</sup> Each Party shall notify the other Parties at least fourteen (14) days<sup>424</sup> **Calendar Days**<sup>425</sup> in advance of its performance of tests of its Interconnection Facilities or Generating Facility. The other Parties have the right, at their own expense, to observe such testing.
- 6.4 Right to Inspect.**<sup>426</sup> Each Party shall have the right, but shall have no obligation to: (i) observe another Party's tests and/or inspection of any of its System Protection Facilities and other protective equipment, including Power System Stabilizers; (ii) review the settings of another Party's System Protection Facilities and other protective equipment; and (iii) review another Party's maintenance records relative to the Interconnection Facilities, the System Protection Facilities and other protective equipment. A Party may exercise these rights from time to time as it deems necessary upon reasonable notice to the other Party. The exercise or non-exercise by a Party of any such rights shall not be construed as an endorsement or confirmation of any element or condition of the Interconnection Facilities or the System Protection Facilities or other protective equipment or the operation thereof, or as a warranty as to the fitness, safety, desirability, or reliability of same. Any information that a Party obtains through the exercise of any of its rights under this Article 6.4 shall be deemed to be Confidential Information and treated pursuant to Article 22 of this LGIA.

## ARTICLE 7. METERING

- 7.1 General.** Each Party shall comply with **any Applicable Reliability Standards and**<sup>427</sup> the Applicable Reliability Council requirements. The Interconnection Customer and CAISO shall comply with the provisions of the CAISO Tariff regarding metering, including Section 10 of the CAISO Tariff. Unless otherwise agreed by the Participating TO and the Interconnection Customer, the Participating TO may install additional Metering Equipment at the Point of Interconnection prior to any operation of any Electric Generating Unit and shall own, operate, test

and maintain such Metering Equipment. Power flows to and from the Large Generating Facility shall be measured at or, at the CAISO's or Participating TO's option for its respective Metering Equipment, compensated to, the Point of Interconnection. The CAISO shall provide metering quantities to the Interconnection Customer upon request in accordance with the CAISO Tariff by directly polling the CAISO's meter data acquisition system. The Interconnection Customer shall bear all reasonable documented costs associated with the purchase, installation, operation, testing and maintenance of the Metering Equipment.

- 7.2 Check Meters.**<sup>428</sup> The Interconnection Customer, at its option and expense, may install and operate, on its premises and on its side of the Point of Interconnection, one or more check meters to check the CAISO-pollled meters or the Participating TO's meters. Such check meters shall be for check purposes only and shall not be used for the measurement of power flows for purposes of this LGIA, except in the case that no other means are available on a temporary basis at the option of the CAISO or the Participating TO. The check meters shall be subject at all reasonable times to inspection and examination by the CAISO or Participating TO or their designees. The installation, operation and maintenance thereof shall be performed entirely by the Interconnection Customer in accordance with Good Utility Practice.
- 7.3 Participating TO Retail Metering.**<sup>429</sup> The Participating TO may install retail revenue quality meters and associated equipment, pursuant to the Participating TO's applicable retail tariffs.

## ARTICLE 8. COMMUNICATIONS

- 8.1 Interconnection Customer Obligations.**<sup>430</sup> The Interconnection Customer shall maintain satisfactory operating communications with the CAISO in accordance with the provisions of the CAISO Tariff and with the Participating TO's dispatcher or representative designated by the Participating TO. The Interconnection Customer shall provide standard voice line, dedicated voice line and facsimile communications at its Large Generating Facility control room or central dispatch facility through use of either the public telephone system, or a voice communications system that does not rely on the public telephone system. The Interconnection Customer shall also provide the dedicated data circuit(s) necessary to provide Interconnection Customer data to the CAISO and Participating TO as set forth in Appendix D, Security Arrangements Details. The data circuit(s) shall extend from the Large Generating Facility to the location(s) specified by the CAISO and Participating TO. Any required maintenance of such communications equipment shall be performed by the Interconnection Customer. Operational communications shall be activated and maintained under, but not be limited to, the following events: system paralleling or separation, scheduled and unscheduled shutdowns, equipment clearances, and hourly and daily load data.
- 8.2 Remote Terminal Unit.**<sup>431</sup> Prior to the Initial Synchronization Date of each Electric Generating Unit, a Remote Terminal Unit, or equivalent data collection and transfer equipment acceptable to the Parties, shall be installed by the Interconnection Customer, or by the Participating TO at the Interconnection Customer's expense, to gather accumulated and instantaneous data to be telemetered to the location(s) designated by the CAISO and by the Participating TO through use of a dedicated point-to-point data circuit(s) as indicated in Article 8.1.

Telemetry to the CAISO shall be provided in accordance with the CAISO's technical standards for direct telemetry. For telemetry to the Participating TO, the communication protocol for the data circuit(s) shall be specified by the Participating TO. Instantaneous bi-directional real power and reactive power flow and any other required information must be telemetered directly to the location(s) specified by the Participating TO.

Each Party will promptly advise the other Parties if it detects or otherwise learns of any metering, telemetry or communications equipment errors or malfunctions that require the attention and/or

correction by another Party. The Party owning such equipment shall correct such error or malfunction as soon as reasonably feasible.

- 8.3 No Annexation.** Any and all equipment placed on the premises of a Party shall be and remain the property of the Party providing such equipment regardless of the mode and manner of annexation or attachment to real property, unless otherwise mutually agreed by the Parties.

## ARTICLE 9. OPERATIONS

- 9.1 General.** Each Party shall comply with Applicable Reliability Standards and<sup>432</sup> the Applicable Reliability Council requirements, ~~and the Interconnection Customer shall execute the Reliability Management System Agreement of the Applicable Reliability Council attached hereto as Appendix G~~<sup>433</sup>. Each Party shall provide to the other Party all information that may reasonably be required by the other Party to comply with Applicable Laws and Regulations and Applicable Reliability Standards.
- 9.2 Balancing Authority Area Notification.**<sup>434</sup> At least three months before Initial Synchronization Date, the Interconnection Customer shall notify the CAISO and Participating TO in writing of the Balancing Authority Area in which the Large Generating Facility intends to be located. If the Interconnection Customer intends to locate the Large Generating Facility in a Balancing Authority Area other than the Balancing Authority Area within whose electrically metered boundaries the Large Generating Facility is located, and if permitted to do so by the relevant transmission tariffs, all necessary arrangements, including but not limited to those set forth in Article 7 and Article 8 of this LGIA, and remote Balancing Authority Area generator interchange agreements, if applicable, and the appropriate measures under such agreements, shall be executed and implemented prior to the placement of the Large Generating Facility in the other Balancing Authority Area.
- 9.3 CAISO and Participating TO Obligations.**<sup>435</sup> The CAISO and Participating TO shall cause the Participating TO's Transmission System to be operated and controlled in a safe and reliable manner and in accordance with this LGIA. The Participating TO at the Interconnection Customer's expense shall cause the Participating TO's Interconnection Facilities to be operated, maintained and controlled in a safe and reliable manner and in accordance with this LGIA. The CAISO and Participating TO may provide operating instructions to the Interconnection Customer consistent with this LGIA and Participating TO and CAISO operating protocols and procedures as they may change from time to time. The Participating TO and CAISO will consider changes to their operating protocols and procedures proposed by the Interconnection Customer.
- 9.4 Interconnection Customer Obligations.**<sup>436</sup> The Interconnection Customer shall at its own expense operate, maintain and control the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA. The Interconnection Customer shall operate the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in accordance with all applicable requirements of the Balancing Authority Area of which it is part, including such requirements as set forth in Appendix C, Interconnection Details, of this LGIA. Appendix C, Interconnection Details, will be modified to reflect changes to the requirements as they may change from time to time. A Party may request that another Party provide copies of the requirements set forth in Appendix C, Interconnection Details, of this LGIA. The Interconnection Customer shall not commence Commercial Operation of an Electric Generating Unit with the Participating TO's Transmission System until the Participating TO provides prior written approval, which approval shall not be unreasonably withheld, for operation of such Electric Generating Unit.
- 9.5 Start-Up and Synchronization.** Consistent with the Parties' mutually acceptable procedures, the Interconnection Customer is responsible for the proper synchronization of each Electric Generating Unit to the CAISO Controlled Grid.

## 9.6 Reactive Power.

**9.6.1 Power Factor Design Criteria.** The Interconnection Customer shall design the Large Generating Facility to maintain a composite power delivery at continuous rated power output at the terminals of the Electric Generating Unit at a power factor within the range of 0.95 leading to 0.90 lagging, unless the CAISO has established different requirements that apply to all generators in the Balancing Authority Area on a comparable basis. Power factor design criteria for wind generators are provided in Appendix H of this LGIA.

**9.6.2 Voltage Schedules.** Once the Interconnection Customer has synchronized an Electric Generating Unit with the CAISO Controlled Grid, the CAISO or Participating TO shall require the Interconnection Customer to maintain a voltage schedule by operating the Electric Generating Unit to produce or absorb reactive power within the design limitations of the Electric Generating Unit set forth in Article 9.6.1 (Power Factor Design Criteria). CAISO's voltage schedules shall treat all sources of reactive power in the Balancing Authority Area in an equitable and not unduly discriminatory manner. The Participating TO shall exercise Reasonable Efforts to provide the Interconnection Customer with such schedules at least one (1) day in advance, and the CAISO or Participating TO may make changes to such schedules as necessary to maintain the reliability of the CAISO Controlled Grid or the Participating TO's electric system. The Interconnection Customer shall operate the Electric Generating Unit to maintain the specified output voltage or power factor within the design limitations of the Electric Generating Unit set forth in Article 9.6.1 (Power Factor Design Criteria), and as may be required by the CAISO to operate the Electric Generating Unit at a specific voltage schedule within the design limitations set forth in Article 9.6.1. If the Interconnection Customer is unable to maintain the specified voltage or power factor, it shall promptly notify the CAISO and the Participating TO.

**9.6.2.1 Governors and Regulators.**<sup>437</sup> Whenever an Electric Generating Unit is operated in parallel with the CAISO Controlled Grid and the speed governors (if installed on the Electric Generating Unit pursuant to Good Utility Practice) and voltage regulators are capable of operation, the Interconnection Customer shall operate the Electric Generating Unit with its speed governors and voltage regulators in automatic operation. If the Electric Generating Unit's speed governors and voltage regulators are not capable of such automatic operation, the Interconnection Customer shall immediately notify the CAISO and the Participating TO and ensure that the Electric Generating Unit operates as specified in Article 9.6.2 through manual operation and that such Electric Generating Unit's reactive power production or absorption (measured in MVARs) are within the design capability of the Electric Generating Unit(s) and steady state stability limits. The Interconnection Customer shall restore the speed governors and voltage regulators to automatic operation as soon as possible ~~and in accordance with the Reliability Management System Agreement in Appendix G~~<sup>438</sup>. If the Large Generating Facility's speed governors and voltage regulators are improperly tuned or malfunctioning, the CAISO shall have the right to order the reduction in output or disconnection of the Large Generating Facility if the reliability of the CAISO Controlled Grid would be adversely affected. The Interconnection Customer shall not cause its Large Generating Facility to disconnect automatically or instantaneously from the CAISO Controlled Grid or trip any Electric Generating Unit comprising the Large Generating Facility for an under or over frequency condition unless the abnormal frequency condition persists for a time period beyond the limits set forth in ANSI/IEEE Standard C37.106, or such other standard as applied to other generators in the Balancing Authority Area on a comparable basis.

**9.6.3 Payment for Reactive Power.** CAISO is required to pay the Interconnection Customer for reactive power that Interconnection Customer provides or absorbs from an Electric Generating Unit when the CAISO requests the Interconnection Customer to operate its Electric Generating Unit outside the range specified in Article 9.6.1, provided that if the CAISO pays other generators for reactive power service within the specified range, it must also pay the Interconnection Customer. Payments shall be pursuant to Article 11.6 or such other agreement to which the CAISO and Interconnection Customer have otherwise agreed.

## **9.7 Outages and Interruptions.**

### **9.7.1 Outages.**

**9.7.1.1 Outage Authority and Coordination.**<sup>439</sup> Each Party may in accordance with Good Utility Practice in coordination with the other Parties remove from service any of its respective Interconnection Facilities or Network Upgrades that may impact another Party's facilities as necessary to perform maintenance or testing or to install or replace equipment. Absent an Emergency Condition, the Party scheduling a removal of such facility(ies) from service will use Reasonable Efforts to schedule such removal on a date and time mutually acceptable to all Parties. In all circumstances any Party planning to remove such facility(ies) from service shall use Reasonable Efforts to minimize the effect on the other Parties of such removal.

**9.7.1.2 Outage Schedules.** The CAISO shall post scheduled outages of CAISO Controlled Grid facilities in accordance with the provisions of the CAISO Tariff. The Interconnection Customer shall submit its planned maintenance schedules for the Large Generating Facility to the CAISO in accordance with the CAISO Tariff. The Interconnection Customer shall update its planned maintenance schedules in accordance with the CAISO Tariff. The CAISO may request the Interconnection Customer to reschedule its maintenance as necessary to maintain the reliability of the CAISO Controlled Grid in accordance with the CAISO Tariff. Such planned maintenance schedules and updates and changes to such schedules shall be provided by the Interconnection Customer to the Participating TO concurrently with their submittal to the CAISO. The CAISO shall compensate the Interconnection Customer for any additional direct costs that the Interconnection Customer incurs as a result of having to reschedule maintenance in accordance with the CAISO Tariff. The Interconnection Customer will not be eligible to receive compensation, if during the twelve (12) months prior to the date of the scheduled maintenance, the Interconnection Customer had modified its schedule of maintenance activities.

**9.7.1.3 Outage Restoration.**<sup>440</sup> If an outage on a Party's Interconnection Facilities or Network Upgrades adversely affects another Party's operations or facilities, the Party that owns or controls the facility that is out of service shall use Reasonable Efforts to promptly restore such facility(ies) to a normal operating condition consistent with the nature of the outage. The Party that owns or controls the facility that is out of service shall provide the other Parties, to the extent such information is known, information on the nature of the Emergency Condition, if the outage is caused by an Emergency Condition, an estimated time of restoration, and any corrective actions required. Initial verbal notice shall be followed up as soon as practicable with written notice explaining the nature of the outage, if requested by a Party, which may be provided by e-mail or facsimile.

- 9.7.2 Interruption of Service.**<sup>441</sup> If required by Good Utility Practice to do so, the CAISO or the Participating TO may require the Interconnection Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect the CAISO's or the Participating TO's ability to perform such activities as are necessary to safely and reliably operate and maintain the Participating TO's electric system or the CAISO Controlled Grid. The following provisions shall apply to any interruption or reduction permitted under this Article 9.7.2:
- 9.7.2.1** The interruption or reduction shall continue only for so long as reasonably necessary under Good Utility Practice;
- 9.7.2.2** Any such interruption or reduction shall be made on an equitable, non-discriminatory basis with respect to all generating facilities directly connected to the CAISO Controlled Grid, subject to any conditions specified in this LGIA;
- 9.7.2.3** When the interruption or reduction must be made under circumstances which do not allow for advance notice, the CAISO or Participating TO, as applicable, shall notify the Interconnection Customer by telephone as soon as practicable of the reasons for the curtailment, interruption, or reduction, and, if known, its expected duration. Telephone notification shall be followed by written notification, if requested by the Interconnection Customer, as soon as practicable;
- 9.7.2.4** Except during the existence of an Emergency Condition, the CAISO or Participating TO shall notify the Interconnection Customer in advance regarding the timing of such interruption or reduction and further notify the Interconnection Customer of the expected duration. The CAISO or Participating TO shall coordinate with the Interconnection Customer using Good Utility Practice to schedule the interruption or reduction during periods of least impact to the Interconnection Customer, the CAISO, and the Participating TO;
- 9.7.2.5** The Parties shall cooperate and coordinate with each other to the extent necessary in order to restore the Large Generating Facility, Interconnection Facilities, the Participating TO's Transmission System, and the CAISO Controlled Grid to their normal operating state, consistent with system conditions and Good Utility Practice.
- 9.7.3 Under-Frequency and Over Frequency Conditions.**<sup>442</sup> The CAISO Controlled Grid is designed to automatically activate a load-shed program as required by **Applicable Reliability Standards and**<sup>443</sup> the Applicable Reliability Council in the event of an under-frequency system disturbance. The Interconnection Customer shall implement under-frequency and over-frequency protection set points for the Large Generating Facility as required by **Applicable Reliability Standards and**<sup>444</sup> the Applicable Reliability Council to ensure "ride through" capability. Large Generating Facility response to frequency deviations of pre-determined magnitudes, both under-frequency and over-frequency deviations, shall be studied and coordinated with the Participating TO and CAISO in accordance with Good Utility Practice. The term "ride through" as used herein shall mean the ability of a Generating Facility to stay connected to and synchronized with the CAISO Controlled Grid during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice.
- 9.7.4 System Protection and Other Control Requirements.**<sup>445</sup>
- 9.7.4.1 System Protection Facilities.**<sup>446</sup> The Interconnection Customer shall, at its expense, install, operate and maintain System Protection Facilities as a part of the Large Generating Facility or the Interconnection Customer's Interconnection

Facilities. The Participating TO shall install at the Interconnection Customer's expense any System Protection Facilities that may be required on the Participating TO's Interconnection Facilities or the Participating TO's Transmission System as a result of the interconnection of the Large Generating Facility and the Interconnection Customer's Interconnection Facilities.

**9.7.4.2** The Participating TO's and Interconnection Customer's protection facilities shall be designed and coordinated with other systems in accordance with Applicable Reliability **Standards, Applicable Reliability**<sup>447</sup> Council criteria,<sup>448</sup> and Good Utility Practice.

**9.7.4.3** The Participating TO and Interconnection Customer shall each be responsible for protection of its facilities consistent with Good Utility Practice.

**9.7.4.4** The Participating TO's and Interconnection Customer's protective relay design shall incorporate the necessary test switches to perform the tests required in Article 6. The required test switches will be placed such that they allow operation of lockout relays while preventing breaker failure schemes from operating and causing unnecessary breaker operations and/or the tripping of the Interconnection Customer's Electric Generating Units.

**9.7.4.5** The Participating TO and Interconnection Customer will test, operate and maintain System Protection Facilities in accordance with Good Utility Practice and, if applicable, the requirements of the Participating TO's Interconnection Handbook.

**9.7.4.6** Prior to the in-service date, and again prior to the Commercial Operation Date, the Participating TO and Interconnection Customer or their agents shall perform a complete calibration test and functional trip test of the System Protection Facilities. At intervals suggested by Good Utility Practice, the standards and procedures of the Participating TO, including, if applicable, the requirements of the Participating TO's Interconnection Handbook, and following any apparent malfunction of the System Protection Facilities, each Party shall perform both calibration and functional trip tests of its System Protection Facilities. These tests do not require the tripping of any in-service generation unit. These tests do, however, require that all protective relays and lockout contacts be activated.

**9.7.5 Requirements for Protection.**<sup>449</sup> In compliance with Good Utility Practice and, if applicable, the requirements of the Participating TO's Interconnection Handbook, the Interconnection Customer shall provide, install, own, and maintain relays, circuit breakers and all other devices necessary to remove any fault contribution of the Large Generating Facility to any short circuit occurring on the Participating TO's Transmission System not otherwise isolated by the Participating TO's equipment, such that the removal of the fault contribution shall be coordinated with the protective requirements of the Participating TO's Transmission System. Such protective equipment shall include, without limitation, a disconnecting device with fault current-interrupting capability located between the Large Generating Facility and the Participating TO's Transmission System at a site selected upon mutual agreement (not to be unreasonably withheld, conditioned or delayed) of the Parties. The Interconnection Customer shall be responsible for protection of the Large Generating Facility and the Interconnection Customer's other equipment from such conditions as negative sequence currents, over- or under-frequency, sudden load rejection, over- or under-voltage, and generator loss-of-field. The Interconnection Customer shall be solely responsible to disconnect the Large Generating Facility and the Interconnection Customer's other equipment if conditions on the CAISO Controlled Grid could adversely affect the Large Generating Facility.

- 9.7.6 Power Quality.**<sup>450</sup> Neither the Participating TO's nor the Interconnection Customer's facilities shall cause excessive voltage flicker nor introduce excessive distortion to the sinusoidal voltage or current waves as defined by ANSI Standard C84.1-1989, in accordance with IEEE Standard 519, any applicable superseding electric industry standard, or any alternative Applicable Reliability Standard or Applicable Reliability<sup>451</sup> Council standard. In the event of a conflict ~~between~~<sup>452</sup> among<sup>453</sup> ANSI Standard C84.1-1989, any applicable superseding electric industry standard, or any alternative Applicable Reliability Standard or Applicable Reliability<sup>454</sup> Council standard, the alternative Applicable Reliability Standard or<sup>455</sup> Applicable Reliability Council standard shall control.
- 9.8 Switching and Tagging Rules.** Each Party shall provide the other Parties a copy of its switching and tagging rules that are applicable to the other Parties' activities. Such switching and tagging rules shall be developed on a non-discriminatory basis. The Parties shall comply with applicable switching and tagging rules, as amended from time to time, in obtaining clearances for work or for switching operations on equipment.
- 9.9 Use of Interconnection Facilities by Third Parties.**<sup>456</sup>
- 9.9.1 Purpose of Interconnection Facilities.**<sup>457</sup> Except as may be required by Applicable Laws and Regulations, or as otherwise agreed to among the Parties, the Interconnection Facilities shall be constructed for the sole purpose of interconnecting the Large Generating Facility to the Participating TO's Transmission System and shall be used for no other purpose.
- 9.9.2 Third Party Users.**<sup>458</sup> If required by Applicable Laws and Regulations or if the Parties mutually agree, such agreement not to be unreasonably withheld, to allow one or more third parties to use the Participating TO's Interconnection Facilities, or any part thereof, the Interconnection Customer will be entitled to compensation for the capital expenses it incurred in connection with the Interconnection Facilities based upon the pro rata use of the Interconnection Facilities by the Participating TO, all third party users, and the Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually-agreed upon methodology. In addition, cost responsibility for ongoing costs, including operation and maintenance costs associated with the Interconnection Facilities, will be allocated between the Interconnection Customer and any third party users based upon the pro rata use of the Interconnection Facilities by the Participating TO, all third party users, and the Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually agreed upon methodology. If the issue of such compensation or allocation cannot be resolved through such negotiations, it shall be submitted to FERC for resolution.
- 9.10 Disturbance Analysis Data Exchange.**<sup>459</sup> The Parties will cooperate with one another in the analysis of disturbances to either the Large Generating Facility or the CAISO Controlled Grid by gathering and providing access to any information relating to any disturbance, including information from oscillography, protective relay targets, breaker operations and sequence of events records, and any disturbance information required by Good Utility Practice.

## ARTICLE 10. MAINTENANCE

- 10.1 Participating TO Obligations.** The Participating TO shall maintain the Participating TO's Transmission System and the Participating TO's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA.



- 10.2 Interconnection Customer Obligations.**<sup>460</sup> The Interconnection Customer shall maintain the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA.
- 10.3 Coordination.**<sup>461</sup> The Parties shall confer regularly to coordinate the planning, scheduling and performance of preventive and corrective maintenance on the Large Generating Facility and the Interconnection Facilities.
- 10.4 Secondary Systems.**<sup>462</sup> The Participating TO and Interconnection Customer shall cooperate with the other Parties in the inspection, maintenance, and testing of control or power circuits that operate below 600 volts, AC or DC, including, but not limited to, any hardware, control or protective devices, cables, conductors, electric raceways, secondary equipment panels, transducers, batteries, chargers, and voltage and current transformers that directly affect the operation of a Party's facilities and equipment which may reasonably be expected to impact the other Parties. Each Party shall provide advance notice to the other Parties before undertaking any work on such circuits, especially on electrical circuits involving circuit breaker trip and close contacts, current transformers, or potential transformers.
- 10.5 Operating and Maintenance Expenses.**<sup>463</sup> Subject to the provisions herein addressing the use of facilities by others, and except for operations and maintenance expenses associated with modifications made for providing interconnection or transmission service to a third party and such third party pays for such expenses, the Interconnection Customer shall be responsible for all reasonable expenses including overheads, associated with: (1) owning, operating, maintaining, repairing, and replacing the Interconnection Customer's Interconnection Facilities; and (2) operation, maintenance, repair and replacement of the Participating TO's Interconnection Facilities.

## ARTICLE 11. PERFORMANCE OBLIGATION

- 11.1 Interconnection Customer's Interconnection Facilities.**<sup>464</sup> The Interconnection Customer shall design, procure, construct, install, own and/or control the Interconnection Customer's Interconnection Facilities described in Appendix A at its sole expense.
- 11.2 Participating TO's Interconnection Facilities.**<sup>465</sup> The Participating TO shall design, procure, construct, install, own and/or control the Participating TO's Interconnection Facilities described in Appendix A at the sole expense of the Interconnection Customer. Unless the Participating TO elects to fund the capital for the Participating TO's Interconnection Facilities, they shall be solely funded by the Interconnection Customer.
- 11.3 Network Upgrades and Distribution Upgrades.**<sup>466</sup> The Participating TO shall design, procure, construct, install, and own the Network Upgrades and Distribution Upgrades described in Appendix A. The Interconnection Customer shall be responsible for all costs related to Distribution Upgrades. Unless the Participating TO elects to fund the capital for the Distribution Upgrades and Network Upgrades, they shall be ~~solely~~<sup>467</sup> funded by the Interconnection Customer **in an amount determined pursuant to the methodology set forth in Section 13 of the LGIP. This specific amount is set forth in Appendix G to this LGIA**<sup>468</sup>.
- 11.4 Transmission Credits.**<sup>469</sup> No later than thirty (30) days<sup>470</sup> **Calendar Days**<sup>471</sup> prior to the Commercial Operation Date, the Interconnection Customer may make a one-time election by written notice to the CAISO and the Participating TO to receive Congestion Revenue Rights as defined in and as available under the CAISO Tariff at the time of the election in accordance with the CAISO Tariff, in lieu of a refund of the cost of Network Upgrades in accordance with Article 11.4.1.

**11.4.1 Repayment of Amounts Advanced for Network Upgrades.**<sup>472</sup> Upon the Commercial Operation Date, the Interconnection Customer shall be entitled to a repayment, equal to the total amount paid to the Participating TO for the cost<sup>473</sup> **costs**<sup>474</sup> of Network Upgrades **for which it is responsible, as set forth in Appendix G**<sup>475</sup>. Such amount shall include any tax gross-up or other tax-related payments associated with Network Upgrades not refunded to the Interconnection Customer pursuant to Article 5.17.8 or otherwise, and shall be paid to the Interconnection Customer by the Participating TO on a dollar-for-dollar basis either through (1) direct payments made on a levelized basis over the five-year period commencing on the Commercial Operation Date; or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years from the Commercial Operation Date. Notwithstanding the foregoing, if this LGIA terminates within five (5) years from the Commercial Operation Date, the Participating TO's obligation to pay refunds to the Interconnection Customer shall cease as of the date of termination. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment. Interest shall continue to accrue on the repayment obligation so long as this LGIA is in effect. The Interconnection Customer may assign such repayment rights to any person.

If the Large Generating Facility fails to achieve commercial operation<sup>476</sup> **Commercial Operation**<sup>477</sup>, but it or another Generating Facility is later constructed and makes use of the Network Upgrades, the Participating TO shall at that time reimburse Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the Generating Facility, if different, is responsible for identifying the<sup>478</sup> **and demonstrating to the Participating TO the appropriate**<sup>479</sup> entity to which reimbursement must be made<sup>480</sup> **in order to implement the intent of this reimbursement obligation.**<sup>481</sup>

**11.4.2 Special Provisions for Affected Systems.**<sup>482</sup> The Interconnection Customer shall enter into an agreement with the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid, as applicable, in accordance with the LGIP. Such agreement shall specify the terms governing payments to be made by the Interconnection Customer to the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid as well as the repayment by the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid. In no event shall the Participating TO be responsible for the repayment for any facilities that are not part of the Participating TO's Transmission System. **In the event the Participating TO is a joint owner with an Affected System or with any other co-owner of a facility affected by the Large Generating Facility, the Participating TO's obligation to reimburse the Interconnection Customer for payments made to address the impacts of the Large Generating Facility on the system shall not exceed the proportionate amount of the cost of any upgrades attributable to the proportion of the jointly-owned facility owned by the Participating TO.**<sup>483</sup>

**11.4.3** Notwithstanding any other provision of this LGIA, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, Congestion Revenue Rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash

reimbursements, merchant transmission Congestion Revenue Rights in accordance with Section 36.11 of the CAISO Tariff.<sup>484</sup> or transmission credits for transmission service that is not associated with the Large Generating Facility.

**11.5 Provision of Security.** At least thirty (30) Calendar Days prior to the commencement of the procurement, installation, or construction of a discrete portion of a Participating TO's Interconnection Facilities, Network Upgrades, or Distribution Upgrades, the <sup>485</sup> **Interconnection Financial Security. The**<sup>486</sup> Interconnection Customer shall provide the Participating TO, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Participating TO and is consistent with the Uniform Commercial Code of the jurisdiction identified in Article 14.2.1. Such security for payment shall be in an amount sufficient to cover the costs for constructing, procuring and installing the applicable portion of the Participating TO's Interconnection Facilities, Network Upgrades, or Distribution Upgrades. Such security shall be reduced on a dollar-for-dollar basis for payments made to the Participating TO for these purposes.<sup>487</sup>

In addition:<sup>488</sup> **11.5.1** The guarantee must be made by an entity that meets the creditworthiness requirements of the Participating TO, and contain terms and conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.<sup>489</sup> **is obligated to provide all necessary Interconnection Financial Security required under Section 9 of the LGIP in a manner acceptable under Section 9 of the LGIP. Failure to satisfy the LGIP's requirements for the provision of Interconnection Financial Security shall result in the Interconnection Request being deemed withdrawn and subject to LGIP Section 3.8.**<sup>490</sup>

**11.5.2** The letter of credit must be issued by a financial institution reasonably acceptable to the Participating TO and must specify a reasonable expiration date.<sup>491</sup>

**11.5.3** The surety bond must be issued by an insurer reasonably acceptable to the Participating TO and must specify a reasonable expiration date.<sup>492</sup>

**11.6 Interconnection Customer Compensation.**<sup>493</sup> If the CAISO requests or directs the Interconnection Customer to provide a service pursuant to Articles 9.6.3 (Payment for Reactive Power) or 13.5.1 of this LGIA, the CAISO shall compensate the Interconnection Customer in accordance with the CAISO Tariff.

**11.6.1 Interconnection Customer Compensation for Actions During Emergency Condition.**<sup>494</sup> The CAISO shall compensate the Interconnection Customer in accordance with the CAISO Tariff for its provision of real and reactive power and other Emergency Condition services that the Interconnection Customer provides to support the CAISO Controlled Grid during an Emergency Condition in accordance with Article 11.6.

## ARTICLE 12. INVOICE

- 12.1 General.** The Participating TO shall submit to the Interconnection Customer, on a monthly basis, invoices of amounts due pursuant to this LGIA for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party under this LGIA, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party. Notwithstanding the foregoing, any invoices between the CAISO and another Party shall be submitted and paid in accordance with the CAISO Tariff.
- 12.2 Final Invoice.**<sup>495</sup> As soon as reasonably practicable, but within twelve months after completion of the construction of the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, the Participating TO shall provide an invoice of the final cost of the construction of the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, and shall set forth such costs in sufficient detail to enable the Interconnection Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates. The<sup>496</sup> **With respect to costs associated with the Participating TO's Interconnection Facilities and Distribution Upgrades, the**<sup>497</sup> Participating TO shall refund to the Interconnection Customer any amount by which the actual payment by the Interconnection Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice; or, in the event the actual costs of construction exceed the Interconnection Customer's actual payment for estimated costs, then the Interconnection Customer shall pay to the Participating TO any amount by which the actual costs of construction exceed the actual payment by the Interconnection Customer for estimated costs within thirty (30) Calendar Days of the issuance of such final construction invoice. **With respect to costs associated with Network Upgrades, the Participating TO shall refund to the Interconnection Customer any amount by which the actual payment by the Interconnection Customer for estimated costs exceeds the actual costs of construction multiplied by the Interconnection Customer's percentage share of those costs, as set forth in Appendix G to this LGIA within thirty (30) Calendar Days of the issuance of such final construction invoice. In the event the actual costs of construction multiplied by the Interconnection Customer's percentage share of those costs exceed the Interconnection Customer's actual payment for estimated costs, then the Participating TO shall recover such difference through its transmission service rates.**<sup>498</sup>
- 12.3 Payment.**<sup>499</sup> Invoices shall be rendered to the Interconnection Customer at the address specified in Appendix F. The Interconnection Customer shall pay, or Participating TO shall refund, the amounts due within thirty (30) Calendar Days of the Interconnection Customer's receipt of the invoice. All payments shall be made in immediately available funds payable to the Interconnection Customer or Participating TO, or by wire transfer to a bank named and account designated by the invoicing Interconnection Customer or Participating TO. Payment of invoices by any Party will not constitute a waiver of any rights or claims any Party may have under this LGIA.
- 12.4 Disputes.**<sup>500</sup> In the event of a billing dispute between the Interconnection Customer and the Participating TO, the Participating TO and the CAISO shall continue to provide Interconnection Service under this LGIA as long as the Interconnection Customer: (i) continues to make all payments not in dispute; and (ii) pays to the Participating TO or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If the Interconnection Customer fails to meet these two requirements for continuation of service, then the Participating TO may provide notice to the Interconnection Customer of a Default pursuant to Article 17. Within thirty (30) Calendar Days after the resolution of the dispute, the Party that owes money to the other Party shall pay the amount due with interest calculated in accordance with the

methodology set forth in FERC's Regulations at 18 C.F.R. § 35.19a(a)(2)(iii). Notwithstanding the foregoing, any billing dispute between the CAISO and another Party shall be resolved in accordance with the provisions of Article 27 of this LGIA.

## ARTICLE 13. EMERGENCIES

### 13.1 [Reserved]

**13.2 Obligations.**<sup>501</sup> Each Party shall comply with the Emergency Condition procedures of the CAISO, NERC, the Applicable Reliability Council, **Applicable Reliability Standards,**<sup>502</sup> Applicable Laws and Regulations, and any emergency procedures set forth in this LGIA.

**13.3 Notice.** The Participating TO or the CAISO shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that affects the Participating TO's Interconnection Facilities or Distribution System or the CAISO Controlled Grid, respectively, that may reasonably be expected to affect the Interconnection Customer's operation of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. The Interconnection Customer shall notify the Participating TO and the CAISO promptly when it becomes aware of an Emergency Condition that affects the Large Generating Facility or the Interconnection Customer's Interconnection Facilities that may reasonably be expected to affect the CAISO Controlled Grid or the Participating TO's Interconnection Facilities. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of the Interconnection Customer's or Participating TO's facilities and operations, its anticipated duration and the corrective action taken and/or to be taken. The initial notice shall be followed as soon as practicable with written notice, if requested by a Party, which may be provided by electronic mail or facsimile, or in the case of the CAISO may be publicly posted on the CAISO's internet web site.

**13.4 Immediate Action.**<sup>503</sup> Unless, in the Interconnection Customer's reasonable judgment, immediate action is required, the Interconnection Customer shall obtain the consent of the CAISO and the Participating TO, such consent to not be unreasonably withheld, prior to performing any manual switching operations at the Large Generating Facility or the Interconnection Customer's Interconnection Facilities in response to an Emergency Condition declared by the Participating TO or CAISO or in response to any other emergency condition.

### 13.5 CAISO and Participating TO Authority.

**13.5.1 General.**<sup>504</sup> The CAISO and Participating TO may take whatever actions or inactions, including issuance of dispatch instructions, with regard to the CAISO Controlled Grid or the Participating TO's Interconnection Facilities or Distribution System they deem necessary during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the CAISO Controlled Grid or the Participating TO's Interconnection Facilities or Distribution System, and (iii) limit or prevent damage, and (iv) expedite restoration of service.

The Participating TO and the CAISO shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. The Participating TO or the CAISO may, on the basis of technical considerations, require the Large Generating Facility to mitigate an Emergency Condition by taking actions necessary and limited in scope to remedy the Emergency Condition, including, but not limited to, directing the Interconnection Customer to shut-down, start-up, increase or decrease the real or reactive power output of the Large Generating Facility; implementing a reduction or disconnection pursuant to Article 13.5.2; directing the Interconnection Customer to assist with black start (if

available) or restoration efforts; or altering the outage schedules of the Large Generating Facility and the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall comply with all of the CAISO's and Participating TO's operating instructions concerning Large Generating Facility real power and reactive power output within the manufacturer's design limitations of the Large Generating Facility's equipment that is in service and physically available for operation at the time, in compliance with Applicable Laws and Regulations.

**13.5.2 Reduction and Disconnection.**<sup>505</sup> The Participating TO or the CAISO may reduce Interconnection Service or disconnect the Large Generating Facility or the Interconnection Customer's Interconnection Facilities when such reduction or disconnection is necessary under Good Utility Practice due to Emergency Conditions. These rights are separate and distinct from any right of curtailment of the CAISO pursuant to the CAISO Tariff. When the CAISO or Participating TO can schedule the reduction or disconnection in advance, the CAISO or Participating TO shall notify the Interconnection Customer of the reasons, timing and expected duration of the reduction or disconnection. The CAISO or Participating TO shall coordinate with the Interconnection Customer using Good Utility Practice to schedule the reduction or disconnection during periods of least impact to the Interconnection Customer and the CAISO and Participating TO. Any reduction or disconnection shall continue only for so long as reasonably necessary under Good Utility Practice. The Parties shall cooperate with each other to restore the Large Generating Facility, the Interconnection Facilities, and the CAISO Controlled Grid to their normal operating state as soon as practicable consistent with Good Utility Practice.

**13.6 Interconnection Customer Authority.**<sup>506</sup> Consistent with Good Utility Practice, this LGIA, and the CAISO Tariff, the Interconnection Customer may take actions or inactions with regard to the Large Generating Facility or the Interconnection Customer's Interconnection Facilities during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service. Interconnection Customer shall use Reasonable Efforts to minimize the effect of such actions or inactions on the CAISO Controlled Grid and the Participating TO's Interconnection Facilities. The CAISO and Participating TO shall use Reasonable Efforts to assist Interconnection Customer in such actions.

**13.7 Limited Liability.**<sup>507</sup> Except as otherwise provided in Article 11.6.1 of this LGIA, no Party shall be liable to any other Party for any action it takes in responding to an Emergency Condition so long as such action is made in good faith and is consistent with Good Utility Practice.

## **ARTICLE 14. REGULATORY REQUIREMENTS AND GOVERNING LAW**

**14.1 Regulatory Requirements.**<sup>508</sup> Each Party's obligations under this LGIA shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the applying Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek and use its Reasonable Efforts to obtain such other approvals. Nothing in this LGIA shall require the Interconnection Customer to take any action that could result in its inability to obtain, or its loss of, status or exemption under the Federal Power Act or the Public Utility Holding Company Act of 1935, as amended, or the Public Utility Regulatory Policies Act of 1978, or the Energy Policy Act of 2005.

## **14.2 Governing Law.**<sup>509</sup>

**14.2.1** The validity, interpretation and performance of this LGIA and each of its provisions shall be governed by the laws of the state where the Point of Interconnection is located, without regard to its conflicts of law principles.

**14.2.2** This LGIA is subject to all Applicable Laws and Regulations.

**14.2.3** Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, rules, or regulations of a Governmental Authority.

## **ARTICLE 15. NOTICES**

**15.1 General.**<sup>510</sup> Unless otherwise provided in this LGIA, any notice, demand or request required or permitted to be given by a Party to another and any instrument required or permitted to be tendered or delivered by a Party in writing to another shall be effective when delivered and may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered mail, addressed to the Party, or personally delivered to the Party, at the address set out in Appendix F, Addresses for Delivery of Notices and Billings.

A Party must update the information in Appendix F as information changes. A Party may change the notice information in this LGIA by giving five (5) Business Days written notice prior to the effective date of the change. Such changes shall not constitute an amendment to this LGIA.

**15.2 Billings and Payments.**<sup>511</sup> Billings and payments shall be sent to the addresses set out in Appendix F.

**15.3 Alternative Forms of Notice.**<sup>512</sup> Any notice or request required or permitted to be given by a Party to another and not required by this LGIA to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out in Appendix F.

**15.4 Operations and Maintenance Notice.**<sup>513</sup> Each Party shall notify the other Parties in writing of the identity of the person(s) that it designates as the point(s) of contact with respect to the implementation of Articles 9 and 10.

## **ARTICLE 16. FORCE MAJEURE**

### **16.1 Force Majeure.**

**16.1.1** Economic hardship is not considered a Force Majeure event.

**16.1.2** No Party shall be considered to be in Default with respect to any obligation hereunder, (including obligations under Article 4), other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other Party in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this Article shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall exercise due diligence to remove such disability with reasonable dispatch, but shall not

be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

## ARTICLE 17. DEFAULT

### 17.1 **Default.**<sup>514</sup>

**17.1.1 General.** No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this LGIA or the result of an act or omission of the other Party. Upon a Breach, the affected non-Breaching Party(ies) shall give written notice of such Breach to the Breaching Party. Except as provided in Article 17.1.2, the Breaching Party shall have thirty (30) Calendar Days from receipt of the Default notice within which to cure such Breach; provided however, if such Breach is not capable of cure within thirty (30) Calendar Days, the Breaching Party shall commence such cure within thirty (30) Calendar Days after notice and continuously and diligently complete such cure within ninety (90) Calendar Days from receipt of the Default notice; and, if cured within such time, the Breach specified in such notice shall cease to exist.

**17.1.2 Right to Terminate.**<sup>515</sup> If a Breach is not cured as provided in this Article, or if a Breach is not capable of being cured within the period provided for herein, the affected non-Breaching Party(ies) shall have the right to declare a Default and terminate this LGIA by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not such Party(ies) terminates this LGIA, to recover from the Breaching Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this Article will survive termination of this LGIA.

## ARTICLE 18. INDEMNITY, CONSEQUENTIAL DAMAGES AND INSURANCE

**18.1 Indemnity.**<sup>516</sup> Each Party shall at all times indemnify, defend, and hold the other Parties harmless from, any and all Losses arising out of or resulting from another Party's action or inactions of its obligations under this LGIA on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the Indemnified Party.

**18.1.1 Indemnified Party.**<sup>517</sup> If an Indemnified Party is entitled to indemnification under this Article 18 as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 18.1, to assume the defense of such claim, such Indemnified Party may at the expense of the Indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

**18.1.2 Indemnifying Party.**<sup>518</sup> If an Indemnifying Party is obligated to indemnify and hold any Indemnified Party harmless under this Article 18, the amount owing to the Indemnified Party shall be the amount of such Indemnified Party's actual Loss, net of any insurance or other recovery.

**18.1.3 Indemnity Procedures.**<sup>519</sup> Promptly after receipt by an Indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 18.1 may apply, the Indemnified Party shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party.



The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Party. If the defendants in any such action include one or more Indemnified Parties and the Indemnifying Party and if the Indemnified Party reasonably concludes that there may be legal defenses available to it and/or other Indemnified Parties which are different from or additional to those available to the Indemnifying Party, the Indemnified Party shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Party or Indemnified Parties having such differing or additional legal defenses.

The Indemnified Party shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Party and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Party, or there exists a conflict or adversity of interest between the Indemnified Party and the Indemnifying Party, in such event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Party, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Party, which shall not be unreasonably withheld, conditioned or delayed.

**18.2 Consequential Damages.**<sup>520</sup> Other than the liquidated damages heretofore described in Article 5.3, in no event shall any Party be liable under any provision of this LGIA for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to another Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

**18.3 Insurance.**<sup>521</sup> Each Party shall, at its own expense, maintain in force throughout the period of this LGIA, and until released by the other Parties, the following minimum insurance coverages, with insurers rated no less than A- (with a minimum size rating of VII) by Bests' Insurance Guide and Key Ratings and authorized to do business in the state where the Point of Interconnection is located, except in the case of the CAISO, the State of California:

**18.3.1** Employer's Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located, except in the case of the CAISO, the State of California.

**18.3.2** Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate combined single limit for personal injury, bodily injury, including death and property damage.

- 18.3.3** Business Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage.
- 18.3.4** Excess Public Liability Insurance over and above the Employer's Liability Commercial General Liability and Business Automobile Liability Insurance coverage, with a minimum combined single limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.
- 18.3.5** The Commercial General Liability Insurance, Business Automobile Insurance and Excess Public Liability Insurance policies shall name the other Parties, their parents, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this LGIA against the Other Party Group and provide thirty (30) Calendar Days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition.
- 18.3.6** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Public Liability Insurance policies shall contain provisions that specify that the policies are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Party shall be responsible for its respective deductibles or retentions.
- 18.3.7** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Public Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this LGIA, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed by the Parties.
- 18.3.8** The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this LGIA.
- 18.3.9** Within ten (10) Calendar Days following execution of this LGIA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) Calendar Days thereafter, each Party shall provide certification of all insurance required in this LGIA, executed by each insurer or by an authorized representative of each insurer.
- 18.3.10** Notwithstanding the foregoing, each Party may self-insure to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program; provided that, such Party's senior unsecured debt or issuer rating is BBB-, or better, as rated by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior unsecured debt rating and issuer rating are both unrated by Standard & Poor's or are both rated at less than BBB- by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9. In the event that a Party is permitted to self-insure pursuant to this Article 18.3.10, it shall notify the other Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.

**18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this LGIA.

## **ARTICLE 19. ASSIGNMENT**

**19.1 Assignment.**<sup>522</sup> This LGIA may be assigned by a Party only with the written consent of the other Parties; provided that a Party may assign this LGIA without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this LGIA; and provided further that the Interconnection Customer shall have the right to assign this LGIA, without the consent of the CAISO or Participating TO, for collateral security purposes to aid in providing financing for the Large Generating Facility, provided that the Interconnection Customer will promptly notify the CAISO and Participating TO of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the CAISO and Participating TO of the date and particulars of any such exercise of assignment right(s), including providing the CAISO and Participating TO with proof that it meets the requirements of Articles 11.5 and 18.3. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this LGIA shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## **ARTICLE 20. SEVERABILITY**

**20.1 Severability.**<sup>523</sup> If any provision in this LGIA is finally determined to be invalid, void or unenforceable by any court or other Governmental Authority having jurisdiction, such determination shall not invalidate, void or make unenforceable any other provision, agreement or covenant of this LGIA; provided that if the Interconnection Customer (or any third party, but only if such third party is not acting at the direction of the Participating TO or CAISO) seeks and obtains such a final determination with respect to any provision of the Alternate Option (Article 5.1.2), or the Negotiated Option (Article 5.1.4), then none of the provisions of Article 5.1.2 or 5.1.4 shall thereafter have any force or effect and the Parties' rights and obligations shall be governed solely by the Standard Option (Article 5.1.1).

## **ARTICLE 21. COMPARABILITY**

**21.1 Comparability.**<sup>524</sup> The Parties will comply with all applicable comparability and code of conduct laws, rules and regulations, as amended from time to time.

## **ARTICLE 22. CONFIDENTIALITY**

**22.1 Confidentiality.** Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by any of the Parties to the other Parties prior to the execution of this LGIA.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection,

if the Party providing the information orally informs the Parties receiving the information that the information is confidential.

If requested by any Party, the other Parties shall provide in writing, the basis for asserting that the information referred to in this Article 22 warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

**22.1.1 Term.**<sup>525</sup> During the term of this LGIA, and for a period of three (3) years after the expiration or termination of this LGIA, except as otherwise provided in this Article 22, each Party shall hold in confidence and shall not disclose to any person Confidential Information.

**22.1.2 Scope.**<sup>526</sup> Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of this LGIA; or (6) is required, in accordance with Article 22.1.7 of this LGIA, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this LGIA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

**22.1.3 Release of Confidential Information.**<sup>527</sup> No Party shall release or disclose Confidential Information to any other person, except to its employees, consultants, Affiliates (limited by the Standards of Conduct requirements set forth in Part 358 of FERC's Regulations, 18 C.F.R. 358), subcontractors, or to parties who may be or considering providing financing to or equity participation with the Interconnection Customer, or to potential purchasers or assignees of the Interconnection Customer, on a need-to-know basis in connection with this LGIA, unless such person has first been advised of the confidentiality provisions of this Article 22 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 22.

**22.1.4 Rights.**<sup>528</sup> Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Parties. The disclosure by each Party to the other Parties of Confidential Information shall not be deemed a waiver by a Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

**22.1.5 No Warranties.**<sup>529</sup> The mere fact that a Party has provided Confidential Information does not constitute a warranty or representation as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to the other Parties nor to enter into any further agreements or proceed with any other relationship or joint venture.

**22.1.6 Standard of Care.**<sup>530</sup> Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use

Confidential Information solely to fulfill its obligations to the other Parties under this LGIA or its regulatory requirements.

**22.1.7 Order of Disclosure.**<sup>531</sup> If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Parties with prompt notice of such request(s) or requirement(s) so that the other Parties may seek an appropriate protective order or waive compliance with the terms of this LGIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

**22.1.8 Termination of Agreement.**<sup>532</sup> Upon termination of this LGIA for any reason, each Party shall, within ten (10) Calendar Days of receipt of a written request from another Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the other Party) or return to the other Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the other Party.

**22.1.9 Remedies.**<sup>533</sup> The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this Article 22. Each Party accordingly agrees that the other Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Article 22, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 22, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 22.

**22.1.10 Disclosure to FERC, its Staff, or a State.**<sup>534</sup> Notwithstanding anything in this Article 22 to the contrary, and pursuant to 18 C.F.R. section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this LGIA, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. section 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this LGIA prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other Parties to the LGIA when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

**22.1.11** Subject to the exception in Article 22.1.10, Confidential Information shall not be disclosed by the other Parties to any person not employed or retained by the other Parties, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by

the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Parties, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this LGIA or as a transmission service provider or a Balancing Authority including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. The Party asserting confidentiality shall notify the other Parties in writing of the information it claims is confidential. Prior to any disclosures of another Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

### **ARTICLE 23. ENVIRONMENTAL RELEASES**

- 23.1** Each Party shall notify the other Parties, first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Large Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Parties. The notifying Party shall: (i) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than twenty-four hours after such Party becomes aware of the occurrence; and (ii) promptly furnish to the other Parties copies of any publicly available reports filed with any Governmental Authorities addressing such events.

### **ARTICLE 24. INFORMATION REQUIREMENTS**

- 24.1 Information Acquisition.**<sup>535</sup> The Participating TO and the Interconnection Customer shall submit specific information regarding the electrical characteristics of their respective facilities to each other as described below and in accordance with Applicable Reliability Standards.
- 24.2 Information Submission by Participating TO.**<sup>536</sup> The initial information submission by the Participating TO shall occur no later than one hundred eighty (180) Calendar Days prior to Trial Operation and shall include the Participating TO's Transmission System information necessary to allow the Interconnection Customer to select equipment and meet any system protection and stability requirements, unless otherwise agreed to by the Participating TO and the Interconnection Customer. On a monthly basis the Participating TO shall provide the Interconnection Customer and the CAISO a status report on the construction and installation of the Participating TO's Interconnection Facilities and Network Upgrades, including, but not limited to, the following information: (1) progress to date; (2) a description of the activities since the last report; (3) a description of the action items for the next period; and (4) the delivery status of equipment ordered.
- 24.3 Updated Information Submission by Interconnection Customer.**<sup>537</sup> The updated information submission by the Interconnection Customer, including manufacturer information, shall occur no later than one hundred eighty (180) Calendar Days prior to the Trial Operation. The Interconnection Customer shall submit a completed copy of the Electric Generating Unit data requirements contained in Appendix 1 to the LGIP. It shall also include any additional information provided to the Participating TO and the CAISO for the Interconnection Studies. Information in this submission shall be the most current Electric Generating Unit design or expected performance data. Information submitted for stability models shall be compatible with the Participating TO and CAISO standard models. If there is no compatible model, the

Interconnection Customer will work with a consultant mutually agreed to by the Parties to develop and supply a standard model and associated information.

If the Interconnection Customer's data is materially different from what was originally provided to the Participating TO and the CAISO for the Interconnection Studies, then the Participating TO and the CAISO will conduct appropriate studies pursuant to the LGIP to determine the impact on the Participating TO's Transmission System and affected portions of the CAISO Controlled Grid based on the actual data submitted pursuant to this Article 24.3. The Interconnection Customer shall not begin Trial Operation until such studies are completed and all other requirements of this LGIA are satisfied.

**24.4 Information Supplementation.**<sup>538</sup> Prior to the Trial Operation date, the Parties shall supplement their information submissions described above in this Article 24 with any and all "as-built" Electric Generating Unit information or "as-tested" performance information that differs from the initial submissions or, alternatively, written confirmation that no such differences exist. The Interconnection Customer shall conduct tests on the Electric Generating Unit as required by Good Utility Practice such as an open circuit "step voltage" test on the Electric Generating Unit to verify proper operation of the Electric Generating Unit's automatic voltage regulator.

Unless otherwise agreed, the test conditions shall include: (1) Electric Generating Unit at synchronous speed; (2) automatic voltage regulator on and in voltage control mode; and (3) a five percent (5 percent) change in Electric Generating Unit terminal voltage initiated by a change in the voltage regulators reference voltage. The Interconnection Customer shall provide validated test recordings showing the responses of Electric Generating Unit terminal and field voltages. In the event that direct recordings of these voltages is impractical, recordings of other voltages or currents that mirror the response of the Electric Generating Unit's terminal or field voltage are acceptable if information necessary to translate these alternate quantities to actual Electric Generating Unit terminal or field voltages is provided. Electric Generating Unit testing shall be conducted and results provided to the Participating TO and the CAISO for each individual Electric Generating Unit in a station.

Subsequent to the Commercial Operation Date, the Interconnection Customer shall provide the Participating TO and the CAISO any information changes due to equipment replacement, repair, or adjustment. The Participating TO shall provide the Interconnection Customer any information changes due to equipment replacement, repair or adjustment in the directly connected substation or any adjacent Participating TO-owned substation that may affect the Interconnection Customer's Interconnection Facilities equipment ratings, protection or operating requirements. The Parties shall provide such information pursuant to Article 5.19.

## **ARTICLE 25. INFORMATION ACCESS AND AUDIT RIGHTS**

**25.1 Information Access.**<sup>539</sup> Each Party (the "disclosing Party") shall make available to the other Party information that is in the possession of the disclosing Party and is necessary in order for the other Party to: (i) verify the costs incurred by the disclosing Party for which the other Party is responsible under this LGIA; and (ii) carry out its obligations and responsibilities under this LGIA. The Parties shall not use such information for purposes other than those set forth in this Article 25.1 and to enforce their rights under this LGIA. Nothing in this Article 25 shall obligate the CAISO to make available to a Party any third party information in its possession or control if making such third party information available would violate a CAISO Tariff restriction on the use or disclosure of such third party information.

**25.2 Reporting of Non-Force Majeure Events.**<sup>540</sup> Each Party (the "notifying Party") shall notify the other Parties when the notifying Party becomes aware of its inability to comply with the provisions of this LGIA for a reason other than a Force Majeure event. The Parties agree to cooperate with

each other and provide necessary information regarding such inability to comply, including the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this Article shall not entitle the Party receiving such notification to allege a cause for anticipatory breach of this LGIA.

**25.3 Audit Rights.**<sup>541</sup> Subject to the requirements of confidentiality under Article 22 of this LGIA, the Parties' audit rights shall include audits of a Party's costs pertaining to such Party's performance or satisfaction of obligations owed to the other Party under this LGIA, calculation of invoiced amounts, the CAISO's efforts to allocate responsibility for the provision of reactive support to the CAISO Controlled Grid, the CAISO's efforts to allocate responsibility for interruption or reduction of generation on the CAISO Controlled Grid, and each such Party's actions in an Emergency Condition.

**25.3.1** The Interconnection Customer and the Participating TO shall each have the right, during normal business hours, and upon prior reasonable notice to the other Party, to audit at its own expense the other Party's accounts and records pertaining to either such Party's performance or either such Party's satisfaction of obligations owed to the other Party under this LGIA. Subject to Article 25.3.2, any audit authorized by this Article shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to each such Party's performance and satisfaction of obligations under this LGIA. Each such Party shall keep such accounts and records for a period equivalent to the audit rights periods described in Article 25.4.

**25.3.2** Notwithstanding anything to the contrary in Article 25.3, each Party's rights to audit the CAISO's accounts and records shall be as set forth in Section 22.1 of the CAISO Tariff.

**25.4 Audit Rights Periods.**

**25.4.1 Audit Rights Period for Construction-Related Accounts and Records.**<sup>542</sup> Accounts and records related to the design, engineering, procurement, and construction of Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades constructed by the Participating TO shall be subject to audit for a period of twenty-four months following the Participating TO's issuance of a final invoice in accordance with Article 12.2. Accounts and records related to the design, engineering, procurement, and construction of Participating TO's Interconnection Facilities and/or Stand Alone Network Upgrades constructed by the Interconnection Customer shall be subject to audit and verification by the Participating TO and the CAISO for a period of twenty-four months following the Interconnection Customer's issuance of a final invoice in accordance with Article 5.2(8).

**25.4.2 Audit Rights Period for All Other Accounts and Records.**<sup>543</sup> Accounts and records related to a Party's performance or satisfaction of all obligations under this LGIA other than those described in Article 25.4.1 shall be subject to audit as follows: (i) for an audit relating to cost obligations, the applicable audit rights period shall be twenty-four months after the auditing Party's receipt of an invoice giving rise to such cost obligations; and (ii) for an audit relating to all other obligations, the applicable audit rights period shall be twenty-four months after the event for which the audit is sought; provided that each Party's rights to audit the CAISO's accounts and records shall be as set forth in Section 22.1 of the CAISO Tariff.

**25.5 Audit Results.**<sup>544</sup> If an audit by the Interconnection Customer or the Participating TO determines that an overpayment or an underpayment has occurred with respect to the other Party, a notice of such overpayment or underpayment shall be given to the other Party together with those records



from the audit which supports such determination. The Party that is owed payment shall render an invoice to the other Party and such invoice shall be paid pursuant to Article 12 hereof.

**25.5.1** Notwithstanding anything to the contrary in Article 25.5, the Interconnection Customer's and Participating TO's rights to audit the CAISO's accounts and records shall be as set forth in Section 22.1 of the CAISO Tariff, and the CAISO's process for remedying an overpayment or underpayment shall be as set forth in the CAISO Tariff.

## ARTICLE 26. SUBCONTRACTORS

**26.1 General.**<sup>545</sup> Nothing in this LGIA shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this LGIA; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this LGIA in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

**26.2 Responsibility of Principal.**<sup>546</sup> The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this LGIA. The hiring Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the CAISO or Participating TO be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under Article 5 of this LGIA. Any applicable obligation imposed by this LGIA upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

**26.3 No Limitation by Insurance.**<sup>547</sup> The obligations under this Article 26 will not be limited in any way by any limitation of subcontractor's insurance.

## ARTICLE 27. DISPUTES

All disputes arising out of or in connection with this LGIA whereby relief is sought by or from the CAISO shall be settled in accordance with the provisions of Article 13 of the CAISO Tariff, except that references to the CAISO Tariff in such Article 13 of the CAISO Tariff shall be read as references to this LGIA. Disputes arising out of or in connection with this LGIA not subject to provisions of Article 13 of the CAISO Tariff shall be resolved as follows:

**27.1 Submission.**<sup>548</sup> In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with this LGIA or its performance, such Party (the "disputing Party") shall provide the other Party with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this LGIA.

**27.2 External Arbitration Procedures.**<sup>549</sup> Any arbitration initiated under this LGIA shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) Calendar Days select a third arbitrator to chair the

arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules") and any applicable FERC regulations; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Article 27, the terms of this Article 27 shall prevail.

**27.3 Arbitration Decisions.** Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of this LGIA and shall have no power to modify or change any provision of this Agreement in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator(s)<sup>550</sup> must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

**27.4 Costs.** Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

## **ARTICLE 28. REPRESENTATIONS, WARRANTIES AND COVENANTS**

**28.1 General.**<sup>551</sup> Each Party makes the following representations, warranties and covenants:

**28.1.1 Good Standing.**<sup>552</sup> Such Party is duly organized, validly existing and in good standing under the laws of the state in which it is organized, formed, or incorporated, as applicable; that it is qualified to do business in the state or states in which the Large Generating Facility, Interconnection Facilities and Network Upgrades owned by such Party, as applicable, are located; and that it has the corporate power and authority to own its properties, to carry on its business as now being conducted and to enter into this LGIA and carry out the transactions contemplated hereby and perform and carry out all covenants and obligations on its part to be performed under and pursuant to this LGIA.

**28.1.2 Authority.**<sup>553</sup> Such Party has the right, power and authority to enter into this LGIA, to become a Party hereto and to perform its obligations hereunder. This LGIA is a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).

**28.1.3 No Conflict.**<sup>554</sup> The execution, delivery and performance of this LGIA does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Party, or any judgment, license, permit, order, material agreement or instrument applicable to or binding upon such Party or any of its assets.

**28.1.4 Consent and Approval.**<sup>555</sup> Such Party has sought or obtained, or, in accordance with this LGIA will seek or obtain, each consent, approval, authorization, order, or acceptance by any Governmental Authority in connection with the execution, delivery and performance of this LGIA, and it will provide to any Governmental Authority notice of any actions under this LGIA that are required by Applicable Laws and Regulations.

## **ARTICLE 29. [RESERVED]**

## **ARTICLE 30. MISCELLANEOUS**

- 30.1 Binding Effect.**<sup>556</sup> This LGIA and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 30.2 Conflicts.**<sup>557</sup> In the event of a conflict between the body of this LGIA and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this LGIA shall prevail and be deemed the final intent of the Parties.
- 30.3 Rules of Interpretation.**<sup>558</sup> This LGIA, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this LGIA, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this LGIA), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any Applicable Laws and Regulations means such Applicable Laws and Regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article of this LGIA or such Appendix to this LGIA, or such Section to the LGIP or such Appendix to the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this LGIA as a whole and not to any particular Article or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".
- 30.4 Entire Agreement.**<sup>559</sup> This LGIA, including all Appendices and Schedules attached hereto, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between or among the Parties with respect to the subject matter of this LGIA. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this LGIA.
- 30.5 No Third Party Beneficiaries.** This LGIA is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.
- 30.6 Waiver.**<sup>560</sup> The failure of a Party to this LGIA to insist, on any occasion, upon strict performance of any provision of this LGIA will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this LGIA shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this LGIA. Termination or Default of this LGIA for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO. Any waiver of this LGIA shall, if requested, be provided in writing.

- 30.7 Headings.**<sup>561</sup> The descriptive headings of the various Articles of this LGIA have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this LGIA.
- 30.8 Multiple Counterparts.** This LGIA may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 30.9 Amendment.** The Parties may by mutual agreement amend this LGIA by a written instrument duly executed by all of the Parties. Such amendment shall become effective and a part of this LGIA upon satisfaction of all Applicable Laws and Regulations.
- 30.10 Modification by the Parties.**<sup>562</sup> The Parties may by mutual agreement amend the Appendices to this LGIA by a written instrument duly executed by all of the Parties. Such amendment shall become effective and a part of this LGIA upon satisfaction of all Applicable Laws and Regulations.
- 30.11 Reservation of Rights.**<sup>563</sup> The CAISO and Participating TO shall each have the right to make a unilateral filing with FERC to modify this LGIA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles and Appendices<sup>564</sup> of this LGIA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these Articles and Appendices<sup>565</sup>:

Recitals, 1, 2.1, 2.2, 2.3, 2.4, 2.6, 3.1, 3.3, 4.1, 4.2, 4.3, 4.4, 5 preamble, 5.4, 5.7, 5.8, 5.9, 5.12, 5.13, 5.18, 5.19.1, 7.1, 7.2, 8, 9.1, 9.2, 9.3, 9.5, 9.6, 9.7, 9.8, 9.10, 10.3, 11.4, 12.1, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24.3, 24.4, 25.1, 25.2, 25.3 (excluding subparts), 25.4.2, 26, 28, 29, 30, Appendix D, Appendix F, Appendix G, and any other Article not reserved exclusively to the Participating TO or the CAISO below.

The Participating TO shall have the exclusive right to make a unilateral filing with FERC to modify this LGIA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles and Appendices<sup>566</sup> of this LGIA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these Articles and Appendices<sup>567</sup>:

2.5, 5.1, 5.2, 5.3, 5.5, 5.6, 5.10, 5.11, 5.14, 5.15, 5.16, 5.17, 5.19 (excluding 5.19.1), 6, 7.3, 9.4, 9.9, 10.1, 10.2, 10.4, 10.5, 11.1, 11.2, 11.3, 11.5, 12.2, 12.3, 12.4, 24.1, 24.2, 25.3.1, 25.4.1, 25.5 (excluding 25.5.1), 27 (excluding preamble), Appendix A, Appendix B, Appendix C, and Appendix E.

The CAISO shall have the exclusive right to make a unilateral filing with FERC to modify this LGIA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles of this LGIA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these Articles:

3.2, 4.5, 11.6, 25.3.2, 25.5.1, and 27 preamble.

The Interconnection Customer, the CAISO, and the Participating TO shall have the right to make a unilateral filing with FERC to modify this LGIA pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this LGIA shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

**30.12 No Partnership.**<sup>568</sup> This LGIA shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership among the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.

**30.13 Joint and Several Obligations.**<sup>569</sup> Except as otherwise provided in this LGIA, the obligations of the CAISO, the Participating TO, and the Interconnection Customer are several, and are neither joint nor joint and several.

**IN WITNESS WHEREOF**, the Parties have executed this LGIA in multiple originals, each of which shall constitute and be an original effective agreement among the Parties.

**[Insert name of Interconnection Customer]**<sup>570</sup>

By: \_\_\_\_\_<sup>571</sup>

Title: \_\_\_\_\_<sup>572</sup>

Date: \_\_\_\_\_<sup>573</sup>

**[Insert name of Participating TO]**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date:

**California Independent System Operator Corporation**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date:

**[Insert name of Interconnection Customer]**<sup>574</sup>

By: \_\_\_\_\_<sup>575</sup>

Title: \_\_\_\_\_<sup>576</sup>

Date: \_\_\_\_\_<sup>577</sup>

**Appendices to LGIA**

Appendix A Interconnection Facilities, Network Upgrades and Distribution Upgrades

Appendix B Milestones

Appendix C Interconnection Details

Appendix D Security Arrangements Details

Appendix E Commercial Operation Date

Appendix F Addresses for Delivery of Notices and Billings

~~Appendix G Reliability Management System Agreement<sup>579</sup>~~

**Appendix G Interconnection Customer's Proportional Share of Costs of Network Upgrades  
for Applicable Project Group<sup>580</sup>**

Appendix H Interconnection Requirements for a Wind Generating Plant

**Interconnection Facilities, Network Upgrades and Distribution Upgrades**

**1. Interconnection Facilities:**

**(a) [insert Interconnection Customer's Interconnection Facilities]:**

**(b) [insert Participating TO's Interconnection Facilities]:**

**2. Network Upgrades:**

**(a) [insert Stand Alone Network Upgrades]:**

**(b) [insert Other Network Upgrades]:**

**(i) [insert Participating TO's Reliability Network Upgrades]**

**(ii) [insert Participating TO's Delivery Network Upgrades]**

**3. Distribution Upgrades:**



**Appendix B**

**To LGIA**

**Milestones**

**Appendix C**

**To LGIA  
Interconnection Details**

**Security Arrangements Details**

Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, all Participating TOs, market participants, and Interconnection Customers interconnected to the CAISO Controlled Grid to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

The Interconnection Customer shall meet the requirements for security implemented pursuant to the CAISO Tariff, including the CAISO's standards for information security posted on the CAISO's internet web site at the following internet address: <http://www.caiso.com/pubinfo/info-security/index.html>.

## Appendix E

To LGIA

## Commercial Operation Date

This Appendix E is a part of the LGIA.<sup>586</sup>

**[This Appendix E sets forth a form of letter to be provided by the Interconnection Customer to the CAISO and Participating TO to provide formal notice of the Commercial Operation of an Electric Generating Unit.]**<sup>587</sup>

**[Date]**

**[CAISO Address]**

**[Participating TO Address]**

Re: \_\_\_\_\_ Electric Generating Unit

Dear \_\_\_\_\_:

On **[Date]** **[Interconnection Customer]** has completed Trial Operation of Unit No. \_\_\_\_\_. This letter confirms that **[Interconnection Customer]** commenced Commercial Operation of Unit No. \_\_\_\_ at the Electric Generating Unit, effective as of **[Date plus one day] and that [Interconnection Customer] provided the CAISO's operations personnel advance notice of its intended Commercial Operation Date no less than five Business Days prior to that date**<sup>588</sup>.

Thank you.

**[Signature]**

**[Interconnection Customer Representative]**

**Addresses for Delivery of Notices and Billings**

**Notices:-**<sup>590</sup>

CAISO:<sup>591</sup>

[To be supplied.]<sup>592</sup>

Participating TO:

[To be supplied.]

Interconnection Customer:

**[To be supplied.]**<sup>593</sup>

CAISO:<sup>594</sup>

[To be supplied.]

**Billings and Payments:**

Participating TO:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

CAISO:

[To be supplied.]

**Alternative Forms of Delivery of Notices (telephone, facsimile or e-mail):**

CAISO:<sup>595</sup>

[To be supplied.]<sup>596</sup>

Participating TO:

[To be supplied.]

Interconnection Customer:

[To be supplied.]

**CAISO:**<sup>597</sup>

**[To be supplied.]**<sup>598</sup>

**Reliability Management System Agreement**<sup>600</sup>**RELIABILITY MANAGEMENT SYSTEM AGREEMENT**<sup>601</sup>  
**by and between**<sup>602</sup>  
**[TRANSMISSION OPERATOR]**<sup>603</sup>  
**and**<sup>604</sup>  
**[GENERATOR]**<sup>605</sup>

**THIS RELIABILITY MANAGEMENT SYSTEM AGREEMENT** (the "Agreement"), is entered into this \_\_\_\_ day of \_\_\_\_\_, 2002, by and between \_\_\_\_\_ (the "Transmission Operator") and \_\_\_\_\_ (the "Generator").<sup>606</sup>

**WHEREAS**, there is a need to maintain the reliability of the interconnected electric systems encompassed by the WSCC in a restructured and competitive electric utility industry;<sup>607</sup>

**WHEREAS**, with the transition of the electric industry to a more competitive structure, it is desirable to have a uniform set of electric system operating rules within the Western Interconnection, applicable in a fair, comparable and non-discriminatory manner, with which all market participants comply; and<sup>608</sup>

**WHEREAS**, the members of the WSCC, including the Transmission Operator, have determined that a contractual Reliability Management System provides a reasonable, currently available means of maintaining such reliability.<sup>609</sup>

**NOW, THEREFORE**, in consideration of the mutual agreements contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Transmission Operator and the Generator agree as follows:<sup>610</sup>

**1. PURPOSE OF AGREEMENT**<sup>611</sup>

The purpose of this Agreement is to maintain the reliable operation of the Western Interconnection through the Generator's commitment to comply with certain reliability standards.<sup>612</sup>

**2. DEFINITIONS**<sup>613</sup>

In addition to terms defined in the beginning of this Agreement and in the Recitals hereto, for purposes of this Agreement the following terms shall have the meanings set forth beside them below:<sup>614</sup>

**Control Area** means an electric system or systems, bounded by interconnection metering and telemetry, capable of controlling generation to maintain its interchange schedule with other Control Areas and contributing to frequency regulation of the Western Interconnection.<sup>615</sup>

**FERC** means the Federal Energy Regulatory Commission or a successor agency.<sup>616</sup>

**Member** means any party to the WSCC Agreement.<sup>617</sup>

**Party** means either the Generator or the Transmission Operator and<sup>618</sup>

**Parties** means both of the Generator and the Transmission Operator.<sup>619</sup>

**Reliability Management System or RMS** means the contractual reliability management program implemented through the WSCC Reliability Criteria Agreement, the WSCC RMS Agreement, this Agreement, and any similar contractual arrangement.<sup>620</sup>

**Western Interconnection** means the area comprising those states and provinces, or portions thereof, in Western Canada, Northern Mexico and the Western United States in which Members of the WSCC operate synchronously connected transmission systems.<sup>621</sup>

**Working Day** means Monday through Friday except for recognized legal holidays in the state in which any notice is received pursuant to Section 8.<sup>622</sup>

**WSCC** means the Western Systems Coordinating Council or a successor entity.<sup>623</sup>

**WSCC Agreement** means the Western Systems Coordinating Council Agreement dated March 20, 1967, as such may be amended from time to time.<sup>624</sup>

**WSCC Reliability Criteria Agreement** means the Western Systems Coordinating Council Reliability Criteria Agreement dated June 18, 1999 among the WSCC and certain of its member transmission operators, as such may be amended from time to time.<sup>625</sup>

**WSCC RMS Agreement** means an agreement between the WSCC and the Transmission Operator requiring the Transmission Operator to comply with the reliability criteria contained in the WSCC Reliability Criteria Agreement.<sup>626</sup>

**WSCC Staff** means those employees of the WSCC, including personnel hired by the WSCC on a contract basis, designated as responsible for the administration of the RMS.<sup>627</sup>

### **3. TERM AND TERMINATION**<sup>628</sup>

**3.1 Term.** This Agreement shall become effective [thirty (30) days after the date of issuance of a final FERC order accepting this Agreement for filing without requiring any changes to this Agreement unacceptable to either Party. Required changes to this Agreement shall be deemed unacceptable to a Party only if that Party provides notice to the other Party within fifteen (15) days of issuance of the applicable FERC order that such order is unacceptable].<sup>629</sup>  
[Note: if the interconnection agreement is not FERC jurisdictional, replace bracketed language with: [on the later of: (a) the date of execution; or (b) the effective date of the WSCC RMS Agreement.]]<sup>630</sup>

**3.2 Notice of Termination of WSCC RMS Agreement.** The Transmission Operator shall give the Generator notice of any notice of termination of the WSCC RMS Agreement by the WSCC or by the Transmission Operator within fifteen (15) days of receipt by the WSCC or the Transmission Operator of such notice of termination.<sup>631</sup>

**3.3 Termination by the Generator.** The Generator may terminate this Agreement as follows:<sup>632</sup>  
(a) following the termination of the WSCC RMS Agreement for any reason by the WSCC or by the Transmission Operator, provided such notice is provided within forty five (45) days of the termination of the WSCC RMS Agreement;<sup>633</sup>  
(b) following the effective date of an amendment to the requirements of the WSCC Reliability Criteria Agreement that adversely affects the Generator, provided notice of such termination is given within forty five (45) days of the date of issuance of a FERC order accepting such amendment for filing, provided further that the forty five (45) day period within which notice of termination is required may be extended by the Generator for an additional forty five (45) days if the Generator gives written notice to the



Transmission Operator of such requested extension within the initial forty-five (45) day period; or<sup>634</sup>  
(c) for any reason on one year's written notice to the Transmission Operator and the WSCC.<sup>635</sup>

**3.4 Termination by the Transmission Operator.** The Transmission Operator may terminate this Agreement on thirty (30) days' written notice following the termination of the WSCC RMS Agreement for any reason by the WSCC or by the Transmission Operator, provided such notice is provided within thirty (30) days of the termination of the WSCC RMS Agreement.<sup>636</sup>

**3.5 Mutual Agreement.** This Agreement may be terminated at any time by the mutual agreement of the Transmission Operator and the Generator.<sup>637</sup>

#### **4. ~~COMPLIANCE WITH AND AMENDMENT OF WSCC RELIABILITY CRITERIA~~**<sup>638</sup>

**4.1 ~~Compliance with Reliability Criteria.~~** The Generator agrees to comply with the requirements of the WSCC Reliability Criteria Agreement, including the applicable WSCC reliability criteria contained in Section IV of Annex A thereof, and, in the event of failure to comply, agrees to be subject to the sanctions applicable to such failure. Each and all of the provisions of the WSCC Reliability Criteria Agreement are hereby incorporated by reference into this Agreement as though set forth fully herein, and the Generator shall for all purposes be considered a Participant, and shall be entitled to all of the rights and privileges and be subject to all of the obligations of a Participant, under and in connection with the WSCC Reliability Criteria Agreement, including but not limited to the rights, privileges and obligations set forth in Sections 5, 6 and 10 of the WSCC Reliability Criteria Agreement.<sup>639</sup>

**4.2 ~~Modifications to WSCC Reliability Criteria Agreement.~~** The Transmission Operator shall notify the Generator within fifteen (15) days of the receipt of notice from the WSCC of the initiation of any WSCC process to modify the WSCC Reliability Criteria Agreement. The WSCC RMS Agreement specifies that such process shall comply with the procedures, rules, and regulations then applicable to the WSCC for modifications to reliability criteria.<sup>640</sup>

**4.3 ~~Notice of Modifications to WSCC Reliability Criteria Agreement.~~** If, following the process specified in Section 4.2, any modification to the WSCC Reliability Criteria Agreement is to take effect, the Transmission Operator shall provide notice to the Generator at least forty-five (45) days before such modification is scheduled to take effect.<sup>641</sup>

**4.4 ~~Effective Date.~~** Any modification to the WSCC Reliability Criteria Agreement shall take effect on the date specified by FERC in an order accepting such modification for filing.<sup>642</sup>

**4.5 ~~Transfer of Control or Sale of Generation Facilities.~~** In any sale or transfer of control of any generation facilities subject to this Agreement, the Generator shall as a condition of such sale or transfer require the acquiring party or transferee with respect to the transferred facilities either to assume the obligations of the Generator with respect to this Agreement or to enter into an agreement with the Control Area Operator in substantially the form of this Agreement.<sup>643</sup>

#### **5. ~~SANCTIONS~~**<sup>644</sup>

**5.1 ~~Payment of Monetary Sanctions.~~** The Generator shall be responsible for payment directly to the WSCC of any monetary sanction assessed against the Generator pursuant to this Agreement and the WSCC Reliability Criteria Agreement. Any such payment shall be made pursuant to the procedures specified in the WSCC Reliability Criteria Agreement.<sup>645</sup>

**5.2 ~~Publication.~~** The Generator consents to the release by the WSCC of information related to the Generator's compliance with this Agreement only in accordance with the WSCC Reliability Criteria Agreement.<sup>646</sup>



**9. APPLICABILITY**<sup>665</sup>

This Agreement (including all appendices hereto and, by reference, the WSCC Reliability Criteria Agreement) constitutes the entire understanding between the Parties hereto with respect to the subject matter hereof, supersedes any and all previous understandings between the Parties with respect to the subject matter hereof, and binds and inures to the benefit of the Parties and their successors.<sup>666</sup>

**10. AMENDMENT**<sup>667</sup>

No amendment of all or any part of this Agreement shall be valid unless it is reduced to writing and signed by both Parties hereto. The terms and conditions herein specified shall remain in effect throughout the term and shall not be subject to change through application to the FERC or other governmental body or authority, absent the agreement of the Parties.<sup>668</sup>

**11. INTERPRETATION**<sup>669</sup>

Interpretation and performance of this Agreement shall be in accordance with, and shall be controlled by, the laws of the State of \_\_\_\_\_ but without giving effect to the provisions thereof relating to conflicts of law. Article and section headings are for convenience only and shall not affect the interpretation of this Agreement. References to articles, sections and appendices are, unless the context otherwise requires, references to articles, sections and appendices of this Agreement.<sup>670</sup>

**12. PROHIBITION ON ASSIGNMENT**<sup>671</sup>

This Agreement may not be assigned by either Party without the consent of the other Party, which consent shall not be unreasonably withheld; provided that the Generator may without the consent of the WSCC assign the obligations of the Generator pursuant to this Agreement to a transferee with respect to any obligations assumed by the transferee by virtue of Section 4.5 of this Agreement.<sup>672</sup>

**13. SEVERABILITY**<sup>673</sup>

If one or more provisions herein shall be invalid, illegal or unenforceable in any respect, it shall be given effect to the extent permitted by applicable law, and such invalidity, illegality or unenforceability shall not affect the validity of the other provisions of this Agreement.<sup>674</sup>

**14. COUNTERPARTS**<sup>675</sup>

This Agreement may be executed in counterparts and each shall have the same force and effect as an original.<sup>676</sup>

**IN WITNESS WHEREOF**, the Transmission Operator and the Generator have each caused this Reliability Management System Agreement to be executed by their respective duly authorized officers as of the date first above written.<sup>677</sup>

\_\_\_\_\_  
\_\_\_\_\_ <sup>678</sup>

By: \_\_\_\_\_ <sup>679</sup>

Name: \_\_\_\_\_ <sup>680</sup>

Title: \_\_\_\_\_ 681

\_\_\_\_\_ 682

By: \_\_\_\_\_ 683

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**Interconnection Customer's Proportional Share of Costs of Network Upgrades for Applicable Project Group**<sup>686</sup>

## INTERCONNECTION REQUIREMENTS FOR A WIND GENERATING PLANT

Appendix H sets forth requirements and provisions specific to a wind generating plant. All other requirements of this LGIA continue to apply to wind generating plant interconnections.

### A. Technical Standards Applicable to a Wind Generating Plant

#### i. Low Voltage Ride-Through (LVRT) Capability

A wind generating plant shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below. ~~The LVRT standard provides for a transition period standard and a post-transition period standard.~~<sup>688</sup>

#### **Transition Period LVRT Standard**<sup>689</sup>

~~The transition period standard applies to wind generating plants subject to FERC Order 661 that have either: (i) interconnection agreements signed and filed with FERC, filed with FERC in unexecuted form, or filed with FERC as non-conforming agreements between January 1, 2006 and December 31, 2006, with a scheduled In-Service Date no later than December 31, 2007, or (ii) wind generating turbines subject to a wind turbine procurement contract executed prior to December 31, 2005, for delivery through 2007.~~<sup>690</sup>

All wind generating plants subject to FERC Order No. 661<sup>691</sup> **must meet the following requirements:**<sup>692</sup>

1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 – 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the Participating TO. ~~The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles at a voltage as low as 0.15 p.u., as measured at the high side of the wind generating plant step-up transformer (i.e. the transformer that steps the voltage up to the transmission interconnection voltage or "GSU"), after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the transmission system.~~<sup>693</sup>

- ~~2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU or to faults that would result in a voltage lower than 0.15 per unit on the high side of the GSU serving the facility.~~<sup>694</sup>
- ~~3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.~~<sup>695</sup>
- ~~4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAR Compensator, etc.) within the wind generating plant or by a combination of generator performance and additional equipment.~~<sup>696</sup>
- ~~5. Existing individual generator units that are, or have been, interconnected to the network at the same location at the effective date of the Appendix H LVRT Standard are exempt from meeting the Appendix H LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Appendix H LVRT Standard.~~<sup>697</sup>

### **Post-transition Period LVRT Standard**<sup>698</sup>

All wind generating plants subject to FERC Order No. 66-1<sup>699</sup> and not covered by the transition period described above must meet the following requirements:<sup>700</sup> 1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4–9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to pre-fault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the Participating TO.<sup>701</sup> The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the CAISO Controlled Grid. A wind generating plant shall remain interconnected during such a fault on the CAISO Controlled Grid for a voltage level as low as zero volts, as measured at the high voltage side of the wind GSU.

2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.
3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAR Compensator) within the wind generating plant or by a combination of generator performance and additional equipment.
5. Existing individual generator units that are, or have been, interconnected to the CAISO Controlled Grid at the same location at the effective date of the Appendix H LVRT Standard are exempt from meeting the Appendix H LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Appendix H LVRT Standard.

### **ii. Power Factor Design Criteria (Reactive Power)**

A wind generating plant shall operate within a power factor within the range of 0.95 leading to 0.95 lagging, measured at the Point of Interconnection as defined in this LGIA in order to maintain a specified voltage schedule, if the **Phase II**<sup>702</sup> Interconnection System Impact<sup>703</sup> Study shows that such a requirement is necessary to ensure safety or reliability. The power factor range standard can be met by

using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two, if agreed to by the Participating TO and CAISO. The Interconnection Customer shall not disable power factor equipment while the wind plant is in operation. Wind plants shall also be able to provide sufficient dynamic voltage support in lieu of the power system stabilizer and automatic voltage regulation at the generator excitation system if the **Phase II**<sup>704</sup> Interconnection System Impact<sup>705</sup> Study shows this to be required for system safety or reliability.

### **iii. Supervisory Control and Data Acquisition (SCADA) Capability**

The wind plant shall provide SCADA capability to transmit data and receive instructions from the Participating TO and CAISO to protect system reliability. The Participating TO and CAISO and the wind plant Interconnection Customer shall determine what SCADA information is essential for the proposed wind plant, taking into account the size of the plant and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

\*\*\*<sup>706</sup>