CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION
FERC ELECTRIC TARIFF
First Revised Sheet No. 1457
THIRD REPLACEMENT VOLUME NO. II
Superseding Original Sheet No. 1457

## **CAISO TARIFF APPENDIX GG**

Large Generator Interconnection Procedures (LGIP) for Interconnection Requests in a Queue Cluster Window

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

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# 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.

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"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, 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).

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## 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.

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## 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.

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## 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.

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- (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.

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## 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.

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## 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 Reguest 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.

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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.

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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.

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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.

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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.

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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.

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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.

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## 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. Deviations from a Participating TO's benchmark per unit costs will be permitted if a reasonable explanation for the deviation is provided and there is no undue discrimination.

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. A schedule for the release and review of per unit costs is set forth in Appendix 5 of this LGIP.

## 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 forty (240) 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

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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. In

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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.

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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.

Within five (5) Business Days following the Results Meeting, the Interconnection Customer shall submit to the CAISO the completed form of Appendix B (Data Form To Be Provided by the Interconnection Customer Prior to Commencement of the Phase II Interconnection Study) to its Large Generator Interconnection Study Process Agreement, and within such Appendix B, the Interconnection Customer shall either (i) confirm the desired deliverability status that the Interconnection Customer had previously designated in the completed form of Appendix A to the Large Generator Interconnection Study Process Agreement (Assumptions Used in Conducting the Phase I Interconnection Study); or (ii) change the status of desired deliverability from Full Capacity Deliverability Status to Energy-Only Deliverability Status.

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, (vii) provide a +/-20% estimate for each Interconnection Request of the final Participating TO's Interconnection Facilities, (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, and (ix) if it is determined that the Delivery Network Upgrades cannot be completed by the Interconnection Customer's identified Commercial Operation Date, provide that operating procedures necessary to allow the Large Generating Facility to interconnect as an energy-only resource, on an interim-only basis, will be developed and utilized until the Delivery Network Upgrades for the Large Generating Facility are completed and placed into service.

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

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# 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:

- 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

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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.

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## 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 applicable Participating TO(s) in an interest-bearing escrow account maintained at a bank or financial institution that is reasonably acceptable to the applicable Participating TO (s);

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- (e) a certificate of deposit in the name of the applicable Participating TO (s) 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 applicable Participating TO (s) 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

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(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.

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- (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, provided, however, that the Interconnection Financial Security shall not be released if this increase in the estimated cost is due to the Interconnection Customer's requested modification to the interconnection configuration.
- (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.

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# 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.

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## 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.

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## Section 11 Large Generator Interconnection Agreement (LGIA).

#### 11.1 Tender.

- 11.1.1 Within thirty (30) Calendar 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.

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## 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.

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## 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.

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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.

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- (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.

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# 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  $\P$  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.

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it is clearly designated or marked in writing

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.

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## 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.

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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.

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# 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.

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# 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.

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## 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.

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# APPENDIX 1 to LGIP INTERCONNECTION REQUEST

Provide three copies of this completed form pursuant to Section 7 of this LGIP Appendix 1 below.

1.		undersigned Interconnection Customer submits this request to interconnect its Large nerating Facility with the CAISO Controlled Grid pursuant to the CAISO Tariff.		
2.	This Int	terconnection 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.	Reques	sted Deliverability Status is for (check one): Full Capacity Energy Only		
4.	The Int	erconnection 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):		

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# CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF

THIRD REPLACEMENT VOLUME NO. II

g.

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Type of project (i.e., gas turbine, hydro, wind, etc.) and general description of the c. equipment configuration; Cogeneration Reciprocating Engine Biomass Steam Turbine Gas Turbine Wind Hydro Photovoltaic 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); 1 Proposed In-Service Date: Proposed Trial Operation date: 1 Proposed Commercial Operation Date: Proposed Term of Service (years): Name, address, telephone number, and e-mail address of the Interconnection e. 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

The Interconnection Customer shall provide to the CAISO the technical data called for in LGIP Appendix 1, Attachment A. Three (3) copies are required.

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Interconnection Customer data (set forth in Attachment A)

# CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF

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Title:

Date:

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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). Evidence of Site Exclusivity as specified in the LGIP and name(s), address(es) and contact 6. 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):

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# 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.	Genera	ating 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:
	Ο.	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:

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3.		hronous Generator – General Information: se repeat the following for each generator)
	A. B. C. D. E. F. G. H. I.	Rated Generator speed (rpm): Rated MVA: Rated Generator Power Factor: Generator Efficiency at Rated Load (%): Moment of Inertia (including prime mover): Inertia Time Constant (on machine base) H: sec or MJ/MVA 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): Please attach generator reactive capability curves. Rated Hydrogen Cooling Pressure in psig (Steam Units only): 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.		ation System Information se repeat the following for each generator)
	A.	<ul> <li>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.</li> <li>(1) Rotating DC commutator exciter with continuously acting regulator. The regulator power source is independent of the generator terminal voltage and current.</li> <li>(2) Rotating DC commentator exciter with continuously acting regulator. The regulator power source is bus fed from the generator terminal voltage.</li> <li>(3) Rotating DC commutator exciter with non-continuously acting regulator (i.e., regulator adjustments are made in discrete increments).</li> <li>(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).</li> <li>(5) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers. The regulator power source is fed from the exciter output voltage.</li> <li>(6) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers.</li> <li>(7) Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from the generator terminal voltage.</li> <li>(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.</li> </ul>
	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
	C. D. E. F.	system.  Excitation system response ratio (ASA):  Full load rated exciter output voltage:  Maximum exciter output voltage (ceiling voltage):  Other comments regarding the excitation system?

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# CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF

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**Power System Stabilizer Information.** 

5.

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the correspondence between dial settings and the time constants or PSE:  Other comments regarding the PSS?  Characteristics of the part A for steam, gas or combined-cycle turbines, Part B for 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 reboth high and low pressure turbines)?  (3) If steam with reheat process, or if combined-cycle, indicate in provided, the percent of full load power produced by each turb Low pressure turbine or gas turbine:  (4) Length of penstock:  (5) Length of penstock:  (6) Typical maximum head (vertical distance from the bottom of the gate, to the water level):  (7) List type of unit (Steam, Gas, or Combined-cycle):  (8) Turbine efficiency at rated load:  (9) Length of penstock:  (1) Turbine efficiency at rated load:  (1) Turbine efficiency at rated load:  (2) Length of penstock:  (3) Average cross-sectional area of the penstock:  (4) Typical maximum head (vertical distance from the bottom of the gate, to the water level):  (5) Is the water supply run-of-the-river or reservoir:			s an exemption has been obtained from WECC. Such an exemption can be obtained for hat do not have suitable excitation systems.)
B. Is the PSS digital or analog? C. Note the input signal source for the PSS?		Α.	Manufacturer:
C. Note the input signal source for the PSS?			Is the PSS digital or analog?
D. Please attach a copy of a block diagram of the PSS from the PSS Institute correspondence between dial settings and the time constants or PSE: 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 Part C for both.  A. Steam, gas or combined-cycle turbines:  (1) List type of unit (Steam, Gas, or Combined-cycle):		C.	Note the input signal source for the PSS?  Bus frequency Shaft speed Bus Voltage
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 heart 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 reboth high and low pressure turbines)? (3) If steam with reheat process, or if combined-cycle, indicate in the provided, the percent of full load power produced by each turbed Low pressure turbine or gas turbine:%  High pressure turbine or steam turbine:%  B. Hydro turbines:  (1) Turbine efficiency at rated load:			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.
(Please repeat the following for each generator)  Please complete Part A for steam, gas or combined-cycle turbines, Part B for heart C for both.  A. Steam, gas or combined-cycle turbines:  (1) List type of unit (Steam, Gas, or Combined-cycle):		E:	Other comments regarding the PSS?
A. Steam, gas or combined-cycle turbines:  (1) List type of unit (Steam, Gas, or Combined-cycle):	6.		
(1) List type of unit (Steam, Gas, or Combined-cycle):  (2) If steam or combined-cycle, does the turbine system have a reboth high and low pressure turbines)?(3) If steam with reheat process, or if combined-cycle, indicate in toprovided, the percent of full load power produced by each turb Low pressure turbine or gas turbine:% High pressure turbine or steam turbine:%  B. Hydro turbines:  (1) Turbine efficiency at rated load:			e complete Part A for steam, gas or combined-cycle turbines, Part B for hydro turbines, and C for both.
(2) If steam or combined-cycle, does the turbine system have a reboth high and low pressure turbines)?		A.	Steam, gas or combined-cycle turbines:
(3) If steam with reheat process, or if combined-cycle, indicate in the provided, the percent of full load power produced by each turb.  Low pressure turbine or gas turbine:			(2) If steam or combined-cycle, does the turbine system have a reheat process (i.e.,
B. Hydro turbines:  (1) Turbine efficiency at rated load:%  (2) Length of penstock:ft  (3) Average cross-sectional area of the penstock:ft2  (4) Typical maximum head (vertical distance from the bottom of the gate, to the water level):ft  (5) Is the water supply run-of-the-river or reservoir:			(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: %
(2) Length of penstock:ft (3) Average cross-sectional area of the penstock:ft2 (4) Typical maximum head (vertical distance from the bottom of the gate, to the water level):ft (5) Is the water supply run-of-the-river or reservoir:ft3/se (6) Water flow rate at the typical maximum head:ft3/se (7) Average energy rate:kW-hrs/acre-ft		B.	
<ul> <li>(5) Is the water supply run-of-the-river or reservoir:</li></ul>			<ul> <li>(2) Length of penstock:ft</li> <li>(3) Average cross-sectional area of the penstock:ft2</li> <li>(4) Typical maximum head (vertical distance from the bottom of the penstock, at the</li> </ul>
			<ul> <li>(5) Is the water supply run-of-the-river or reservoir:</li></ul>

(Please repeat the following for each generator. All new generators are required to install PSS

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	C.	Comp	lete this	s section for each machine, independent of the turbine type.
		(1) (2) (3) (4)	Maxir Minin	ne manufacturer: MW num turbine power output: MW num turbine power output (while on line): MW num turbine power output:
7.	Sync	hronous	s Gener	ator and Associated Equipment – Dynamic Models:
	dynar data. within	mic mode The mar the web	el from t nual is a osite: 1)	overnor, exciter and power system stabilizer, select the appropriate the General Electric PSLF Program Manual and provide the required input vailable on the GE website at <a href="https://www.gepower.com">www.gepower.com</a> . Select the following links Our Businesses, 2) GE Power Systems, 3) Energy Consulting, 4) GE PSLF User's Manual.
	defini	tion of ea	ach para	the GE PSLF User's Manual to detailed descriptions of specific models, a ameter, a list of the output channels, explanatory notes, and a control n. The block diagrams are also available on the CAISO Website.
	Accui chanç genei	rate mod ges in fac	els are i cility req veloper	nce in developing the models, we suggest you contact General Electric. important to obtain accurate study results. Costs associated with any quirements that are due to differences between model data provided by the and the actual generator test data, may be the responsibility of the
8.	Induc	ction Ge	nerator	Data:
	A. B. C.	Mome Do yo Note:	ent of Industrial ou wish in Sufficie	etor Power Factor at rated load:etia (including prime mover):eclose blocking? Yes, Noent capacitance may be on the line now, or in the future, and the generator te unexpectedly.

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# CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF

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_				
0	Generator	Short	Circuit	Data
3.	Generator	SHULL	CIICUIL	Dala

10.

11.

THIRD REPLACEMENT VOLUME NO. II

Line Charging (B/2):

\*\* On 100-MVA and nominal line voltage (kV) Base

Generator Short Circuit Data For each generator, provide the following reactances expressed in p.u. on the generator base
<ul> <li>X"1 – positive sequence subtransient reactance:</li> <li>X"2 – negative sequence subtransient reactance:</li> <li>X"0 – zero sequence subtransient reactance:</li> </ul>
Generator Grounding:
<ul> <li>A Solidly grounded</li> <li>B Grounded through an impedance</li> <li>Impedance value in p.u on generator base. R: p.u.</li> <li>X: p.u.</li> <li>C Ungrounded</li> </ul>
Step-Up Transformer Data
For each step-up transformer, fill out the data form provided in Table 1.
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**

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Issued on: November 25, 2008 Effective: September 26, 2008

\_ p.u\*\*

# CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II Sup

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### 12. Wind Generators

Number of generators to be	interconnected pursu	ant to this Interconnection Rec	quest:
Elevation:	Single Phase _	Three Phase	
Inverter manufacturer, mod	el name, number, and	version:	
List of adjustable setpoints	for the protective equip	oment or software:	
Field Volts:			<del></del>
Field Amperes:			
Motoring Power (kW):			
Neutral Grounding Resistor			
I22t or K (Heating Time Con	stant):		
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			
Reactive Power Required In			
Total Rotating Inertia H	Per Unit on K	/A 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.

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# CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

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### TABLE 1

### TRANSFORMER DATA

UNIT			
NUMBER OF TRAN	SFORMERS	PHASE	
RATED KVA Connection (Delta, Wye, Gnd.)	H Winding	X Winding	Y Winding
55 C Rise 65 C Rise			
RATED VOLTAGE			
BIL			
AVAILABLE TAPS (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	Н	Χ	Υ
Ohms			
CURRENT TRANSFORMER RATIOS			
H X	Y	N	
PERCENT EXCITING CURREN	IT 100 % Voltage; <sub>-</sub>	110% Vo	oltage

Issued by: Laura Manz, Vice President, Market and Infrastructure Development Issued on: November 25, 2008 Effective: September 26, 2008

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.

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First Revised Sheet No. 1511 Superseding Original Sheet No. 1511

"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, 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, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities 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.

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# First Revised Sheet No. 1512 Superseding Original Sheet No. 1512

# 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.

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First Revised Sheet No. 1513 Superseding Original Sheet No. 1513

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.

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#### 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.

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First Revised Sheet No. 1515 Superseding Original Sheet No. 1515

# Appendix 3 to LGIP

# LARGE GENERATOR INTERCONNECTION STUDY PROCESS AGREEMENT

	AGREEMENT is made and entered into thisday of, 20by and between, a organized and existing under the laws of the State of,
nonprofit public	on Customer") and the California Independent System Operator Corporation, a California benefit corporation existing under the laws of the State of California, ("CAISO"). The Customer and the CAISO each may be referred to as a "Party," or collectively as the
	RECITALS
generating cap	<b>EAS</b> , the Interconnection Customer is proposing to develop a Large Generating Facility or acity addition to an existing Generating Facility consistent with the Interconnection tted by the Interconnection Customer dated; and
	<b>EAS,</b> the Interconnection Customer desires to interconnect the Large Generating Facility Controlled Grid; and
performed Inter Facility to the C procurement ar	<b>EAS</b> , the Interconnection Customer has requested the CAISO to conduct or cause to be reconnection Studies to assess the system impact of interconnecting the Large Generating CAISO Controlled Grid and to specify and estimate the cost of the equipment, engineering, and construction work needed on the Participating TO's electric system in accordance with actice to physically and electrically connect the Large Generating Facility to the CAISO;
NOW, the Parties agre	<b>THEREFORE,</b> in consideration of and subject to the mutual covenants contained herein ee 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.

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- 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.

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# 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.
- 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.

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- 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.

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First Revised Sheet No. 1519 Superseding Original Sheet No. 1519

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.

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

# CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II Sup

**California Independent System Operator Corporation** 

First Revised Sheet No. 1520 Superseding Original Sheet No. 1520

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.

By:	
Printed Name:	
Title:	_
Date:	_
[Insert name of the Interconnection Customer]	
[Insert name of the Interconnection Customer]  By:	
Ву:	

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF
THIRD REPLACEMENT VOLUME NO. II Supe

First Revised Sheet No. 1521 Superseding Original Sheet No. 1521

# 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)

Issued by: Laura Manz, Vice President, Market and Infrastructure Development

First Revised Sheet No. 1522 Superseding Original Sheet No. 1522

# 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?YesNo
Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation?YesNo (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.

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# CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF THIRD REPLACEMENT VOLUME NO. II

First Revised Sheet No. 1523 Superseding Original Sheet No. 1523

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 of	on tower leg)*			
Number of third party easements required for t	ransmission lines*:			
* To be completed in coordination with the Participating TO or CAISO.				
Is the Large Generating Facility in the Participa	ating TO's service area?			
YesNo				
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 receives back feed power	Date:			
Generation Testing	Date:			
Commercial Operation Date:				
Level of Deliverability: Choose one of the following:				
Energy Only				
Full Capacity				

Issued by: Laura Manz, Vice President, Market and Infrastructure Development Issued on: November 25, 2008

Effective: September 26, 2008

### First Revised Sheet No. 1524 Superseding Original Sheet No. 1524

## **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 Ge	enerator	
Interconnection Procedures and Interconnection Study Agreements ("Agreement"), da	ated	
, is entered into between the California Independent Syst	em Operat	tor
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.

#### 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.

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# 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.
- **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

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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.

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- **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.

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means "through and including".

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"

- 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.

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- **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.

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CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION
FERC ELECTRIC TARIFF
First Revised Sheet No. 1530
THIRD REPLACEMENT VOLUME NO. II
Superseding Original Sheet No. 1530

**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**

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Superseding Original Sheet No. 1531

#### **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

- CAISO forwards the IR to the PTO within three (3) Business Days (BD) of receipt of IR from 1. Interconnection Customer (IC)
- PTO(s) provides any feed back regarding IR to CAISO within 3 BD 2.
- CAISO distributes draft Scoping Meeting minutes for review within 5 BD of Scoping Meeting. 3.
- PTO(s) provide any comments to the Scoping Meeting minutes within 2 BD of receipt of draft 4. Scoping Meeting minutes.
- 5. CAISO issues the final Scoping Meeting minutes within 3 BD of receipt of comments.

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# **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.  CAISO updates summer peak Base Cases to reflect withdrawn projects from previous queue cluster study. PTOs update off-peak Base Cases.  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
Short C	Circuit Duty (concurrent with the LF/PT/S)		
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

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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
Facility	cost estimates and schedules		
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
Final R	eport		
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.		
Final S	tudy Report		
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

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	cost estimates and schedules for the direct		
Facility	/ Costs and Schedules  At the CAISO's direction, PTO(s) prepares detailed		
	CAISO will finalize the report.		
31	report.  PTO submits final draft report to the CAISO. The		
30	recommendations conflict with PTO conclusions, then CAISO and PTO must coordinate to resolve conflicts. Any remaining conflicts must be noted in the final	14	272-285*
	PTO incorporates CAISO directions, conclusions and recommendations. If CAISO conclusions and		
29	CAISO reviews draft plan of service report and submits comments, recommendations and direction to the PTO.	9	263-271*
28	of service report.	7	256-262*
Final P	lan of Service Report  At the CAISO's direction, PTO(s) prepares draft plan		
	staged in segments over time.		
27	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	30	226-255*
	At the CAISO's direction, the PTOs perform additional operational studies to identify the optimal approach for		
26	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*
25	CAISO reviews and approves cases from line 24.  At the CAISO's direction, the PTOs perform		
	II Interconnection Study having the same operating date and deliver to CAISO.	00	101 100
24	PTOs develop draft off-peak and summer peak operating year Base Cases as appropriate where each case includes all Generating Facilities in Phase	30	151-180*
	the activities described in lines 24 through 32. (See Appendix C of the CAISO's proposal for the generator interconnection process reform.)		
23.1	not requiring CPUC or CAISO Governing Board approval, or that have already gone through a stakeholder process, would proceed immediately to		
	process, these projects would proceed through the activities described in lines 24 through 32. Projects		
	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		

<sup>\*</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.

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# **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]

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