

October 19, 2010

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

Re: California Independent System Operator Corporation Docket No. ER11- -000

Tariff Amendment to Revise Generator Interconnection Procedures

Dear Secretary Bose:

The California Independent System Operator Corporation ("ISO")¹ is submitting proposed tariff revisions to revise its generator interconnection process in order to harmonize its large and small generation interconnection procedures. One of the key elements of the ISO's proposal, known as the Generator Interconnection Procedures ("GIP"), is the application of the same cluster study process used for large generators to small generators.² As discussed in detail below, these amendments are necessary to address inefficiencies in the ISO's current process for interconnecting small generators due to the drastic increase in the volume of small generator interconnection requests and the conflict between the ISO's study processes for small and large generators. The GIP proposal addresses these issues by adopting, in most cases, an integrated clustered study process for both small and large generators that will provide significant benefits for developers of all sizes. Moreover, the GIP includes several new features that will allow for more streamlined interconnections for smaller projects, as well as those projects of any size that

The ISO (which is sometimes also referred to as the CAISO) submits this filing pursuant to Section 205 of the Federal Power Act ("FPA"), 16 U.S.C. § 824d, and Section 35.13 of the Commission's regulations, 18 C.F.R. § 35.13, and in compliance with Order No. 714, Electronic Tariff Filings, FERC Stats. & Regs. ¶ 31,276 (2009). Capitalized terms not otherwise defined herein have the meanings set forth in Appendix A of the ISO tariff.

Small generators are facilities with a capacity of 20 MW or less. Large generators are facilities with a capacity greater than 20 MW.

are electrically independent from other generators in the ISO's interconnection queue, and are in a position to be studied faster than the cluster study process. These amendments will benefit all interconnection customers.

The ISO requests that the Commission accept the GIP, effective as of December 19, 2010, *i.e.*, sixty-one days from the date of this tariff amendment filing.

I. Executive Summary

The primary purpose of the GIP tariff amendment is to address significant delays and backlogs in the ISO's small generator interconnection process that have developed over the past three years because of circumstances unique to the ISO. There are two primary problems faced by the ISO relating to the small generator interconnection process. First, since 2008, the ISO has experienced a large and rapidly increasing volume of small generator interconnection requests, to a level which has made it impossible for the ISO to study these projects serially under the method within the timelines of the current Small Generator Interconnection Procedures ("SGIP"). Second, because the ISO's SGIP utilizes a serial study process while the ISO's Large Generator Interconnection Procedures ("LGIP") uses a cluster study process, there have been significant conflicts between the timelines for how small generators and large generators are studied.

The GIP amendment, a product of extensive stakeholder input, is the best means to resolve these challenges and ensure that the ISO has the fairest and most efficient interconnection process for both small and large generators going forward, consistent with the Commission's Order No. 2003 and Order No. 2006. Moreover, it is particularly important to implement this process at this juncture because of the increasing number of renewable resources that have and will continue to seek interconnection to the ISO's grid, to bring to fruition California's ambitious Renewable Portfolio Standards ("RPS") requirements, which, at 33 percent are the highest in the nation. Given the substantial expansion of renewable resources that will be needed to meet the RPS targets, it is vitally important to optimize the ISO's interconnection procedures to process the large number of requests, for both small and large generators, in the most efficient manner possible. Indeed, there are 160 pending active requests to interconnect small generators, and all but one of these represent renewable projects.

The primary feature of the GIP is an integrated cluster study process, which assigns both small and large generator interconnection requests to annual queue clusters for study in groups of electrically related projects. The protocol for these studies is a streamlined version of the study procedures that the ISO adopted two years ago in the reform of its large generator interconnection process (known as the "GIPR"), which the ISO has implemented with much

success. In the first cluster study cycle under the GIPR, the ISO simultaneously studied one hundred and eight large generator facilities, completing this work three months ahead of the schedule. The ISO has refined the process even further in the GIP proposal, and believes it can improve upon its recent experience through the GIP's integrated cluster study process to eliminate the delays caused by the receipt of a large number of small generator requests in a relatively short span, while resolving the timing conflicts between the small and large generator processes. This integrated process will also provide small generators with other benefits of the GIPR reforms, such as earlier cost certainty, fairer allocation of the costs of transmission upgrades, and the ability to obtain deliverability of a generator's output.

In addition to these improvements and benefits, the GIP proposal includes a number of features that are intended to recognize and accommodate the special circumstances of small generators, consistent with the Commission's goal in Order No. 2006 of providing a streamlined and simplified interconnection process for small generators. These include:

- study deposits based on project size that will generally be less than the average study costs under the ISO's current procedures;
- lower financial security deposit requirements for small generators;
- incorporation of the "fast track" interconnection process currently applicable to small generators and expansion of the threshold for that process from 2 to 5 MW so as to allow more projects to qualify;
- enhanced deliverability options that will allow small generators already in operation, as well as those currently in the study process, to obtain full capacity deliverability status for their facilities through a shorter process and at lower cost than under the ISO's current procedures;
- reduction in the overall cluster study processing timelines from those currently set forth in the ISO's large generator interconnection procedures, resulting in an overall study timeline that is only minimally longer than the best-case small generator interconnection procedure timeline;
- introduction of an independent study process to allow the expedited processing of those requests that are electrically independent of other requests; and
- a simplified interconnection agreement for small generators similar to the pro forma agreement set forth in Order No. 2006.

The GIP is neutral as to non-generation sources such as demand response.³ To the extent that a project such as advanced storage facility or a pumped storage facility is treated as a generation resource, the GIP is flexible enough to accommodate such projects. Accordingly, the GIP process will accommodate such technologies. Moreover, to the extent that the GIP facilitates faster additions of renewable generation on the electrical system, there may be an increased need for firming and shaping resources such as demand response and advanced energy storage, and, thus, the business model for their development could be promoted.

Taken together, the elements of the GIP improve the interconnection process and result in fair and efficient treatment for both large and small generators. The GIP is fully consistent with the Commission's directives in Order No. 2006, as well as the Commission's subsequent decisions approving the integration of the small and large generator interconnection procedures for the Midwest ISO and the Southwest Power Pool. For these reasons, the GIP proposal is just and reasonable, and the Commission should approve it as filed.

II. Need for the GIP Tariff Revisions

The foundation for the ISO's current process for interconnecting small generators to the ISO controlled grid derives from the Commission's Order No. 2006 and its progeny, which adopted standardized procedures and an agreement that would apply to the interconnection of generators up to 20 MW in size. The ISO's SGIP and accompanying Small Generator Interconnection Agreement ("SGIA"), which incorporate the directives of Order Nos. 2006, *et al.*, have successfully insured that small generator interconnection customers in California have open access to the ISO's transmission system. However, as discussed in the attached testimony of Stephen Rutty, Manager of Grid Assets at the ISO, a set of circumstances specific to the ISO has arisen in the past few years that undermines the efficiency of the ISO's present small generator interconnection process. The result is a large and increasing backlog of

Demand response resources acting as a Proxy Demand Resource through the ISO's Proxy Demand Resource product are not subject to the ISO's interconnection processes.

Standardization of Small Generator Interconnection Agreements and Procedures, Order No. 2006, FERC Stats. & Regs. ¶ 61,180 (2005) ("Order No. 2006"), order on reh'g, Order No. 2006-A, FERC Stats. & Regs. ¶ 31,196 (2005) ("Order No. 2006-A"), order on reh'g, Order No. 2006-B, FERC Stats. & Regs. ¶ 31,221 (2006). For ease of reference, Order Nos. 2006, et seq. will collectively be referred to hereafter as "Order No. 2006" unless the context requires otherwise.

See Prepared Direct Testimony of Stephen Rutty, Exh. No. ISO-1, at 3-9. Mr. Rutty's testimony is provided in Attachment C to the instant GIP tariff amendment filing. Hereafter, Mr. Rutty's testimony is cited as the "Rutty Testimony." This tariff amendment also includes the testimony of Robert Sparks, Manager of Regional Transmission (South) at the ISO. Mr. Sparks'

pending small generator interconnection requests, a situation that is contrary to the Commission's intent that small generators be provided with a less costly and faster connection process for small generators, which was the purpose behind the SGIP.⁶

The GIP is designed to overcome the two main, interrelated challenges that the ISO faces in applying its current small generator interconnection process so as to insure that that process successfully realizes the goals of Order No. 2006. The first challenge is that, due in large part to California's RPS targets, there has been a large and rapidly increasing volume of small generators seeking to interconnect to the ISO's transmission grid under the SGIP. Secondly, because the ISO's SGIP and LGIP utilize different study processes (serial versus cluster), timing conflicts have arisen between studies of small generating facilities under the SGIP and studies of large generating facilities under the LGIP.⁷

In combination, these two challenges have resulted in a study backlog for small generator requests that has become unworkably large. As Mr. Rutty explains in his testimony, even assuming a best-case scenario (*i.e.*, assuming no withdrawals, no restudies, and no interactions with ongoing LGIP clusters), the ISO estimates that it would take as long as six to eight years from October 1, 2010 to complete the studies for all small generators currently in the ISO's queue under the ISO's current SGIP process.⁸ This situation is clearly untenable from the perspective of small generator developers, and would prove a serious impediment to the successful implementation of California's RPS goals, given the large amount of renewable generation seeking to interconnect as small generators.

testimony (Exh. No. ISO-2) is provided in Attachment D and is cited to hereafter as the "Sparks Testimony."

See Order No. 2006 at P 36.

The SGIP is contained in Appendix S of the ISO tariff, the SGIA is contained in Appendix T of the ISO tariff, the LGIP is contained Attachment Y of the ISO tariff, and the ISO's Large Generator Interconnection Agreement ("LGIA") is contained in Appendix Z of the ISO tariff. The provisions in Appendices Y and Z of the ISO tariff, which the ISO proposes to revise in the instant tariff amendment, concern the LGIP and LGIA for the queue cluster window. They should not be confused with the Large Generator Interconnection Procedures contained in Appendix U of the ISO tariff or the Large Generator Interconnection Agreement contained in Appendix V of the ISO tariff, which do not concern the queue cluster window and which the ISO does not propose to revise in the instant tariff amendment.

⁸ Rutty Testimony at 7.

A. A Large and Increasing Volume of Small Generator Interconnection Requests Has Made It Impossible for the ISO to Efficiently Process Such Requests Under Its Current SGIP

Over the past three years, the ISO has seen a dramatic increase in the number of small generating facilities seeking interconnection to the ISO controlled grid under the SGIP. Prior to 2008, the ISO received fewer than ten small generator interconnection requests annually. Since 2008, however, the ISO has received over 180 small generator interconnection requests. To further illustrate the increasing trend, the ISO received 130 of these requests this year alone. The ISO currently has 160 active small generator requests under the SGIP, proposing to interconnect a total of 2,978 MW.9 Only one of these active proposed small generator interconnection requests in the ISO queue is not a renewable project. 10 A primary driver of the increasing number of both large and small interconnection requests is the state of California's RPS, which requires that at least 33 percent of California's retail load be served by renewable energy by 2020. 11 As the ISO has recently explained to the Commission, meeting the 33 percent RPS targets requires an aggressive expansion of renewable generation in California. 12 This can be seen by the fact that there is only one non-renewable project among the 160 active SGIP projects in the gueue.

Given the 2020 date for meeting the 33 percent RPS targets, the ISO does not expect the increasing rate of small generator interconnection requests to abate any time soon. To the contrary, the ISO anticipates the increase in numbers of small generation applications to continue, for at least the next several years. Moreover, this increase may become greater still, as some large generator developers appear to have been breaking up large generator projects into smaller-component projects for study as multiple small generators, an event that the ISO would expect to see repeated in the future.

This recent influx of large numbers of interconnection requests, all in a relatively short span of time, makes it virtually impossible for the ISO and its participating transmission owners to process the requests in a serial fashion

d. at 5.

¹⁰ *Id.*

See report of the California Public Utilities Commission ("CPUC") entitled *Renewables Portfolio Standard Quarterly Report – Q4 2009*, at 1, 4, available at http://www.cpuc.ca.gov/NR/rdonlyres/52BFA25E-0D2E-48C0-950C-9C82BFEEF54C/0/FourthQuarter2009RPSLegislativeReportFINAL.pdf.

See the ISO's Petition for Waiver of Tariff Provisions Regarding Interconnection Financial Security and Request for Ruling Within 45 Days, Docket No. ER10-1656-000, at 2-3 (June 30, 2010).

within the SGIP study timelines while also meeting the timelines for the LGIP. The ISO recognizes that, in many situations, a serial interconnection study process appears to offer advantages for both interconnecting generators and transmission providers. However, the unique situation confronting the ISO with respect to the large and increasing volume of small generator interconnection requests means that using a serial approach as the default study process for small generators is not the most efficient means for realizing the goals of Order No. 2006.

Under the SGIP's serial study process, all proposed generating facility projects are studied one at a time in succession, and the level of analysis to determine transmission upgrades is at the individual generation project level, as planners must evaluate what is the next increment of transmission upgrade triggered by adding each new generation facility. Accordingly, each successive generation project is studied based on a transmission system that assumes the upgrades required by preceding projects are in place. Because each project has its own separate timeline, the studies for a particular project cannot be undertaken until studies for previous electrically related projects are completed. Therefore, as more projects enter the queue, a study backlog develops and becomes increasingly large as more projects enter the queue, because subsequent projects must wait for the results of the studies of any electrically related earlier queued projects to be studied. Due to this fact, and the fact that the SGIP provides interconnection customers with discrete periods in which they can make decisions regarding how and if they wish to proceed in the process. this situation cannot be addressed in any meaningful way by simply devoting more resources to the study process.

This situation is further exacerbated by project withdrawals, which often require the ISO to restudy projects further back in the queue because those projects were originally studied assuming, as part of the base case, the presence of transmission upgrades that were identified as triggered by the interconnecting projects in front of them that withdrew As the later customer sees that its project now triggers more expensive upgrades, this can lead to a cascading effect of further withdrawals, which in turn creates the need for further restudies.

For these reasons, it is problematic to use the serial study approach when many generation projects require simultaneous study. A serial approach is predicated upon a base case environment in which the transmission system configuration is relatively static. However, because of the large number of both small and large generator interconnection requests it receives, the ISO finds itself in a situation where the transmission system configuration is very dynamic. In this environment, a cluster study approach is more suitable, as it raises the level of analysis for transmission upgrades from the individual project level to the group of electrically related generation projects connecting at relatively the same points in time.

B. The ISO Tariff Contains Different Study Processes for Small and Large Generators, Which Causes Timing Conflicts that Result in Further Delays to Small Generator Interconnections

The second challenge that the GIP is intended to overcome is the fact that the ISO's current large and small interconnection procedures generally run on separate study tracks and do not account for the interdependency between interconnections of small and large generators. As the Commission recognized in Order No. 2006, it is appropriate to treat small and large generators differently in certain respects. However, in a strictly electrical sense, there is no practical difference between small generators and large generators, insofar as both types of projects are seeking to interconnect to the same transmission system. Because transmission upgrades are often "lumpy" in nature, even a relatively small project can trigger the need for upgrades, therefore affecting the interconnection of other generators, both small and large, that are electrically related to it. Therefore, interconnection studies must take into account all generators interconnecting in a particular area on the grid, regardless of whether they are considered "small" or "large" for tariff purposes.

The ISO processes interconnection requests under the SGIP using a serial study process, while interconnection requests under the LGIP are placed into clusters, subdivided by location into study groups, and undergo a twophased study process (Phase I and Phase II interconnection studies). When there are both small and large projects interconnecting in the same general area of the grid, the timing differences between the LGIP and SGIP processes presents a challenge to determining what generation projects trigger what transmission upgrades in a fair and efficient manner. The primary problem is that, at the time the ISO must conduct studies for projects in the SGIP, base cases are often incomplete, and do not reflect any transmission upgrades that might be required as a result of generation under study in the most recent LGIP queue cluster. The LGIP base cases are updated after every Phase I and Phase Il interconnection study, or approximately twice a year. Therefore, if a particular small generation project undergoing SGIP study is electrically related to one or more projects being studied in a large generator cluster, the ISO must make a Hobson's choice between delaying the small generator's study until the LGIP cluster study is completed, and the base case updated, or providing an SGIP study that is based on potentially premature assumptions regarding the outcome of the LGIP cluster study, while conditioning the SGIP study by stating that the study conclusions may need to be revised once the LGIP cluster study is completed.

Neither of these choices is very desirable. On the one hand, waiting to perform a small generator's study until the next LGIP cluster study is completed can interject a significant delay into the small generator's study process, particularly when the small generator's timeline does not happen to neatly

coincide with the LGIP study timeline. Any such study delays will translate into delays in finalizing the small generator's interconnection and achieving commercial operation, which can potentially jeopardize the small generator's ability to obtain or maintain financing and increase the carrying costs for site leases.

On the other hand, moving forward based on assumptions regarding the conclusions of LGIP cluster studies may result in a small generator study that does not provide meaningful information for the small developer to use to evaluate its project when the completed cluster studies show that the study assumptions put into the small generator study were not borne out. The needed revisions introduce delays into the process, and may also expose small generator customers to substantial increases in financial responsibility for network upgrades, if additional upgrades are required as a result of the outcome of the LGIP cluster. Unlike the clustered LGIP process, the SGIP process does not include cost caps on the customer's financing responsibility. Therefore, SGIP interconnection customers can be fully exposed to such increases. As with delays, such increases can jeopardize a small generator's ability to continue in the interconnection process. In sum, as long as the SGIP and LGIP interconnection study processes remain on different tracks, delays and cost uncertainty will result, which will prove particularly deleterious to small generators.

III. **Explanation of Proposed Reforms**

As Mr. Rutty discusses in his testimony, the GIP proposal will address the challenges facing the ISO's small generator interconnection process by implementing an integrated set of interconnection procedures for both small and large generators based on those successfully implemented by the ISO in its GIPR LGIP reform.¹³ The GIP does not simply place small generator requests into the existing large generator process. It builds on the strong foundation of the ISO's prior GIPR reforms, while also incorporating numerous refinements and improvements, so that both small and large generator projects can be processed in the fairest and most efficient manner possible. The GIP recognizes and accounts for the unique characteristics of small generators and provides them, where appropriate, an expedited path to interconnection. For these reasons, the GIP proposal will fully achieve the goals of Order No. 2006, and should be approved.

By streamlining and improving the process for small generators to interconnect to the ISO, the GIP will expedite the interconnection of renewable projects, many of which meet the definition of small generators. This will significantly assist in the effort to meet California's ambitious RPS goals.

¹³ Rutty Testimony at 9-13.

A. The ISO's GIP Process Will Address the Challenges Currently Faced by the ISO's Small Generator Interconnection Process in a Manner Consistent with Order No. 2006 and Subsequent Commission Precedent

With respect to the problems caused by the volume and timing of interconnection requests, the GIP will solve these problems by grouping small generator interconnection requests, by default, in annual queue clusters and studying electrically related projects using group studies. Under this approach, a group of projects collectively, and not an individual project, triggers the need for transmission upgrades, and the study process is more scalable to account for circumstances in which the group members enlarge or contract during the course of a study cycle. Therefore, delays associated with the need to defer studies of later queued projects in order to complete the studies of electrically related earlier queued projects will be eliminated. Likewise, the GIP will account for the interdependency between small and large generator requests by combining the small and large generator processes into an integrated set of procedures. Under this approach, both small and large generators will submit interconnection requests into annual queue clusters, and projects will be studied together, to the extent they are electrically interrelated. By studying both small and large generators at the same time, the GIP will eliminate the timing conflicts between the SGIP and LGIP processes, thereby streamlining the interconnection of small generators to the ISO controlled grid.

The integration of the two processes will also extend to small generators benefits that the GIPR reforms have already provided to large generators. First, the two-phase interconnection study process will provide small generators with earlier certainty regarding their responsibility for the costs of network upgrades because those costs are capped based on the results of the Phase I study, with any additional costs borne by the applicable Participating TO(s). In addition, the allocation of network upgrades based on each project's contribution to the need for network upgrades will ensure that small generators are not saddled with the financial responsibility for funding large upgrades, which can occur under the current process. Small generators will also benefit from being able to be studied for full capacity deliverability status, which is vital given how important it is for generators to establish deliverability in order to obtain financing and secure power purchase contracts.

As with its earlier reforms aimed at large generator interconnections, the ISO carefully considered the benefits associated with the serial processing of small generator requests, such as the clear delineation of priorities and rights, but ultimately concluded that, given the large and increasing volume of interconnection requests, continuing to use a serial process as a default study procedure would be impossible to efficiently manage, and would result in even greater backlogs and longer delays. The ISO believes that such an outcome

would be unreasonable and inconsistent with the principles of Order No. 2006. Indeed, in Order No. 2006, the Commission reiterated the conclusion it reached in its Order No. 2003 that "clustering is the Commission's preferred method for conducting interconnection studies, and should be seriously considered by all Transmission Providers." When compared to the open-ended and backlogged serial SGIP study process, which, because of the factors discussed above, offers neither prompt study results nor cost certainty, the clustered study proposal embodied in the GIP is just and reasonable and in accordance with the principles articulated by the Commission in Order No. 2006.

The ISO's integration of its small and large generator interconnection processes is also consistent with previous Commission precedent. Specifically, two other independent system operators and regional transmission organizations, the Midwest Independent Transmission System Operator, Inc. ("Midwest ISO") and the Southwest Power Pool, Inc. ("SPP"), have obtained Commission approval to combine their interconnection procedures regarding small generators and large generators into a single set of generator interconnection procedures. In approving these tariff changes, the Commission implicitly found that an RTO or ISO's use of a combined set of interconnection procedures is consistent with Order No. 2006. The Midwest ISO and SPP explained in their respective filings that combining their interconnection procedures would increase the efficiency of the interconnection process and enhance the uniformity of treatment between small and large generators while still recognizing important differences between different sizes of generators. 15 For the reasons explained in this transmittal letter and in the testimony of Messrs. Rutty and Sparks, the Commission should likewise permit the ISO to implement its own combined Generator Interconnection Procedures.

B. The GIP Includes a Number of Features that Account for the Special Needs of Small Generators

In addition to the features discussed above, the ISO is proposing a number of improvements and additions to its current LGIP process that recognize

Order No. 2006 at P 181 (citing *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, FERC Stats. & Regs. ¶ 31,146, at P 155 (2003) ("Order No. 2003")).

Midwest ISO Electric Tariff Filing Regarding Interconnection Queuing Practices, Docket No. ER08-1169-000 (June 26, 2008), at 21-23; *Midwest Independent Transmission System Operator, Inc.*, 124 FERC ¶ 61,183, at P 17(5) and Ordering Paragraph (A) (2008) (order conditionally approving Midwest ISO tariff amendment); SPP Submission of Revisions to Open Access Transmission Tariff to Incorporate Interconnection Procedures for Small Generators Into Attachment V, Docket No. ER10-681-000 (Jan. 29, 2010); *Southwest Power Pool, Inc.*, Commission Letter Order (Docket No. ER10-681-000) (Mar. 26, 2010) (order approving SPP tariff amendment).

the different needs of small generators, and, consistent with the goals of Order No. 2006, provide small generators with a simplified and accelerated path to interconnection. First, the GIP will make the ISO's current interconnection process more efficient by reducing the overall cluster study processing timelines from those currently set forth in the LGIP, resulting in an overall study timeline that is only minimally longer than the best-case SGIP timeline. In this regard, the GIP will increase by only a few months the tariff timeline for small generation facility applicants to complete the interconnection study process. In return, such applicants will receive a good-faith, capped estimate of their financial responsibility as soon as, and perhaps sooner than, they would under the serial SGIP process.

The GIP will streamline the interconnection process in other respects as well. The GIP includes study deposits based on project size that will generally be less than the average study costs under the ISO's Commission-approved SGIP, and includes lower financial security deposit requirements for small generators. Further, the GIP introduces enhanced deliverability options that will allow small generators that are already interconnected, as well as those currently in the SGIP study process, to obtain full capacity deliverability status for their facilities through a shorter process and at lower cost than under the ISO's current procedures.

The GIP also incorporates simplified and accelerated procedures included in the SGIP that are applicable to two types of small generators that have minimal impact on the transmission system: (1) a "Fast Track Process" that uses technical screens to evaluate a small generating facility no larger than a specified size (2 MW under Order No. 2006) and (2) a "10 kW inverter process" that uses the same technical screens to evaluate a certified inverter-based small generating facility no larger than 10 kW. 17 The ISO is proposing to expand the Fast Track Process so that it applies to projects that are 5 MW or smaller. This will allow more projects to qualify under the streamlined Fast Track Process, while at the same time ensuring system safety and reliability. In addition, the GIP introduces an independent study process to allow the expedited processing of those requests that are electrically independent of other requests in the ISO's interconnection queue. This process will particularly benefit small generators because the proposed criteria for inclusion in this process center on accommodating those projects seeking earlier commercial operation dates that have a minimal impact on the grid.

¹⁶ Order No. 2006 at P 36.

¹⁷ See id.

Finally, the ISO is proposing to retain its separate Small Generator Interconnection Agreement. This will provide small generators with a simplified set of terms necessary to achieve interconnection relative to large generators.

In sum, the ISO's proposed GIP approach is consistent with and will further the purposes of Order No. 2006 even in light of the changed circumstances that have developed in California.

IV. Proposed Tariff Changes

A. Overview of GIP Tariff Changes

The overarching purpose of this GIP tariff amendment is to incorporate into Appendix Y of the ISO tariff – which currently contains the LGIP – a set of interconnection rules applicable to both small generating facilities and large generating facilities, resulting in the fairest and most efficient interconnection process for all generators. The GIP tariff amendment will also revise Appendix Y to include, in addition to the existing generator cluster study process, two alternative study processes: an "Independent Study Process" and a "Fast Track Process." Further, the GIP tariff amendment will revise the provisions in Appendix Y regarding queue cluster times and other aspects of the interconnection request and study processes, as well as the provisions regarding interconnection financial security. In addition, the GIP tariff amendment will add to Appendix Y new deliverability assessment options and also provisions to facilitate the transition of existing SGIP interconnection requests to the GIP. The GIP tariff amendment will also revise the SGIA contained in Appendix T of the ISO tariff and the LGIA contained in Appendix Z of the ISO tariff to include changes to conform them to the GIA, and will revise the SGIA to make conforming changes pursuant to a recent notification from the Western Electricity Coordinating Council of its intent to terminate certain agreements with the ISO. Lastly, the GIP tariff amendment will make various conforming and miscellaneous revisions to the ISO tariff to align them with the GIP and to improve overall process efficiency. Messrs. Rutty and Sparks address these various tariff changes in their testimony, as indicated in the discussion below regarding the tariff changes.

As explained below, all of the modifications to Appendix Y proposed herein are either imported directly from the ISO's existing, Commission-approved SGIP and SGIA or are justified based on the specific circumstances facing the ISO. Therefore, the ISO's GIP proposal meets the Commission's "independent entity variation" standard for modifications to its pro forma interconnection procedures and agreements.¹⁸

Id. at PP 544, 549. The independent entity variations standard is "a balanced approach that recognizes that an RTO [regional transmission organization] or ISO [independent system operator] has different operating characteristics depending on its size and location and is less

B. Application of GIP Provisions to Both Small and Large Generating Facilities

The primary modification effected by the GIP tariff amendment consists of processing both small and large generator requests pursuant to one set of integrated procedures, under which the default option for all generators will involve inclusion in clustered studies under a modified version of the procedures implemented by the ISO's earlier GIPR Amendment. This involves submitting interconnection requests during one of two annual cluster application windows, grouping and study of projects based on their electrical relation, and determination of upgrades pursuant to a two-phase study approach.

Pursuant to the GIP study process, small generators will benefit from having better and earlier certainty regarding their responsibility for the costs of network upgrades. Under the integrated process, both small and large generators will receive the results of the Phase I interconnection study less than 140 days after commencement of that study. As with the ISO's current LGIP, the results of the Phase I study will act as a cap on customers' liability for funding any network upgrade costs, so that any increase in upgrade costs determined after the completion of the Phase I study will not be allocated to interconnection customers, but will be borne by the applicable participating transmission owner.¹⁹

Additionally, the integration of small and large generator study processes will ensure that the costs of network upgrades are allocated proportionally and equitably, based on each project's contribution to the need for network upgrades. Because of the "lumpy" nature of transmission upgrades, even a relatively small generation project can trigger substantial upgrades, presenting the small generator with funding obligations that can deter these projects from continuing with their interconnection requests. Under the integrated approach, upgrade costs will be shared pro rata among all small and large generators within a study group, with the allocation being based on each generator's requested level of deliverability and project size. In short, small generators will have more certainty as to their exposure to network upgrade costs, and assurance that such costs will be allocated fairly based on each project's contribution to the need for such upgrades.²⁰

likely to act in an unduly discriminatory manner than a Transmission Provider that is a market participant. The RTO or ISO shall therefore have greater flexibility to customize its interconnection procedures and agreements to fit regional needs." Order No. 2003 at P 827.

¹⁹ Rutty Testimony at 15-16.

²⁰ *Id.* at 16.

C. The Independent Study Process and the Fast Track Process

The GIP tariff amendment adds two alternative interconnection study processes to the existing cluster study process set forth in the LGIP. The two new study processes are the Independent Study Process, which will be set forth in Section 4 of the GIP, and the Fast Track Process, which will be set forth in Section 5 of the GIP. The GIP tariff amendment also adds the new defined terms "Independent Study Process" and "Fast Track Process" to the GIP. Further, the GIP tariff amendment adds language to various provisions of the GIP to distinguish among the existing generator cluster study process, the Independent Study Process, and the Fast Track Process.

1. The Independent Study Process

In order to make the interconnection study process more efficient, the ISO and stakeholders determined that they should add to the GIP a study process that would apply to generating facilities that can be studied and approved for interconnection independent of the ISO's other study processes. The Independent Study Process will permit such generating facilities to be studied outside of the cluster process, which will benefit those generating facilities by allowing them to be studied on an individual and expedited basis, thereby allowing them to achieve a commercial operation date in advance of that which would be possible under the cluster process. This will prove particularly beneficial to small generators that are effectively independent from other generators in the gueue by virtue of their electrical remoteness, or because of their minor-to-nonexistent impact on the grid due to their small size, and will provide them with a path to a faster interconnection. The Independent Study Process will use a serial study approach that is similar to that contained in the current SGIP. The Independent Study Process will also improve the overall efficiency of the GIP process because it will exempt projects that can be studied on their own from having to be included in the Phase I and Phase II interconnection studies for clustered projects, which have a longer study timeline.²¹

Pursuant to the Independent Study Process, the ISO, in coordination with the applicable participating transmission owners, will study interconnection requests eligible for treatment under the Independent Study Process independently from other interconnection requests. In order to be processed under the Independent Study Process, an interconnection request must meet certain eligibility criteria specified in the GIP tariff amendment.²² Specifically, the interconnection customer must provide, along with its interconnection request, an

²¹ *Id.* at 17-18.

See GIP Sections 4 and 4.1.

objective demonstration that inclusion in a "Queue Cluster" will not accommodate the desired commercial operation date for the generating facility.²³ As part of the required eligibility demonstration, the interconnection customer must show that the desired commercial operation date is physically and commercially achievable pursuant to a demonstration of at least two of three criteria set forth in the GIP tariff amendment.²⁴ Also, the interconnection customer must demonstrate site exclusivity.²⁵ In addition, the proposed generating facility must be electrically independent of interconnection requests included in an existing queue cluster and electrically independent of any other generating facility that is currently being studied under an earlier-queued Independent Study Process interconnection request.²⁶ Limiting eligibility for the Independent Study Process to those customers who can demonstrate a commercial need for an earlier commercial operation date will promote the overall viability of this process because the ISO will be able to focus its resources on studying only those generators that have a legitimate commercial need to be studied independently. This will ensure that the ISO can meet the expedited timelines set forth in the Independent Study Process.²⁷

In order to be considered electrically independent of other requests, each interconnection request submitted under the Independent Study Process must pass both a flow impact test and a short circuit test set forth in the GIP. These tests, including a hypothetical example of how the flow impact test will be applied, are discussed at length in Mr. Sparks' testimony. As Mr. Sparks explains, the flow impact and short circuit tests were developed by the ISO and stakeholders to determine objectively whether the electrical consequences for nearby transmission facilities of interconnecting the proposed generating facility are expected to be sufficiently small that the generating facility can accurately be described as electrically independent from other projects already being studied by the ISO. Although in many cases the determination of whether a generator is electrically independent of other projects being studied in the interconnection queue can be determined simply by inspection and the application of engineering

GIP Section 4.1.1. Queue Cluster is a new defined term added in the GIP tariff amendment to Appendix A of the ISO tariff. A Queue Cluster is defined as a set of interconnection requests processed pursuant to the GIP other than pursuant to the Fast Track Process or the Independent Study Process

²⁴ GIP Section 4.1.1.

GIP Section 4.1.2. Similarly, under Section 1.3.5 of the current SGIP, the interconnection customer must demonstrate site control.

²⁶ GIP Section 4.1.3.

²⁷ Rutty Testimony at 19-20.

Sparks Testimony at 3-12.

judgment, such determinations are not always so clear, particularly when large projects are involved. Therefore, the ISO, in conjunction with its stakeholders, determined that customers would be best served by an objective test as to the criteria for determining those projects that would have minimal or no impact on the interconnection of other projects in the queue.²⁹ The available power flow and short circuit base cases that are being used for the most recent queue cluster will be used as the starting base cases for these tests.³⁰

Pursuant to the flow impact test, the ISO, in coordination with the applicable participating transmission owner, will identify the transmission facility closest, in terms of electrical distance, to the proposed point of interconnection of the generating facility being tested that will be electrically impacted, either as a result of network upgrades identified or reasonably expected to be needed by generating facilities currently being studied in a queue cluster, or as a result of network upgrades identified or reasonably expected to be needed by earlier-queued projects currently being studied through the Independent Study Process. If the current Queue Cluster Studies or earlier-queued Independent Study Process studies have not yet determined which transmission facilities electrically impacted by the generating facility require network upgrades, and the ISO cannot reasonably anticipate whether such transmission facilities will require network upgrades from any other data, then the ISO will wait to conduct the independence analysis until sufficient information exists in order to make this determination.³¹

The next step in the flow impact test is that the incremental power flow on the closest transmission facility that is caused by the generating facility being tested will be divided by the lesser of the generating facility's size or the transmission facility capacity. If the result is five percent or less, the generating facility will pass the flow impact test. If the generating facility being tested is tested against the nearest transmission facility and that transmission facility has been impacted by a cluster that required an upgrade as the result of a contingency, then that contingency will be used when applying the flow impact test. ³²

Id. at 4-5. As Mr. Sparks explains in further detail, the ISO sampled 32 SGIP projects from the current interconnection queue and tested those projects individually to determine how many of them would pass the flow impact and short circuit tests. The ISO found that approximately 25 percent of the projects would pass both tests. Id. at 11-12.

³⁰ GIP Section 4.2.

³¹ GIP Section 4.2.1(i).

³² GIP Section 4.2.1(ii)

If the generating facility being tested under the flow impact test is reasonably expected to impact transmission facilities that were identified when testing one or more earlier-queued generating facilities currently being studied through the Independent Study Process, than an additional aggregate power flow test will be performed on those earlier-identified transmission facilities. The aggregate power flow test will require that the aggregated power flow of the generating facility being tested, plus the flow of all earlier-queued generating facilities currently being studied under the Independent Study Process that were tested against the transmission facilities described above, must be five percent or less of the transmission facility's capacity. However, even if the aggregate power flow on any transmission facility tested pursuant to these provisions is greater than five percent of the transmission facility's capacity but the incremental power flow as a result of the generating facility being tested is one percent or less of the transmission facility's capacity, the generating facility will pass the test. If the generating facility being tested is tested against the nearest transmission facility and that transmission facility has been impacted by a cluster that required an upgrade as a result of a contingency, then that contingency will be used when applying the flow impact test. The generating facility being tested must pass both this aggregate power flow test as well as the incremental power flow test, in no particular order.33

The short circuit test provides that, if the short circuit contribution from the generating facility being tested at the closest transmission facility described under the flow impact test is less than 100 amperes, the generating facility will pass the short circuit test.³⁴

If a proposed generating facility passes both tests, the ISO, the affected participating transmission owner, any affected system operator, and the interconnection customer will take part in a scoping meeting to discuss the interconnection request and review existing studies relevant to the interconnection request, unless the ISO, the participating transmission owner, and interconnection customer mutually agree to omit the scoping meeting. No later than five business days after the scoping meeting (or agreement to forego the meeting), the ISO will provide the interconnection customer with an Independent Study Process Study Agreement, a pro forma version of which will be included in new Appendix 6 to the GIP. If the interconnection customer executes the Independent Study Process Study Agreement, the generating facility will be studied under a process that is very similar to the process in the current SGIP, including a system impact study and (if necessary) a facilities study. The Independent Study Process Study Agreement is similar to the

GIP Section 4.2.1(iii).

³⁴ GIP Section 4.2.2.

³⁵ GIP Sections 4.3-4.5.

existing Large Generator Interconnection Study Process Agreement in Appendix 3 of the LGIP. As part of the GIP tariff amendment, the ISO also proposes to modify Appendix 3 to re-title the agreement contained in it as the Generator Interconnection Study Process Agreement for Queue Clusters, and to make minor, non-substantive changes.

Generators interconnecting under the Independent Study Process will only be studied as energy-only. If a generator studied under the Independent Study Process wishes to obtain full capacity deliverability status, the GIP provides that such generators will have a deliverability assessment performed as part of the next scheduled Phase I and Phase II interconnection studies for Queue Clusters. If the deliverability assessment identifies any delivery network upgrades that are triggered by the interconnection request, the interconnection customer will be responsible to pay its proportionate share of the costs of those upgrades pursuant to the GIP. If the generating facility achieves its commercial operation date before the deliverability assessment is completed and any necessary delivery network upgrades are in service, the proposed generating facility will be treated as an energy-only deliverability status proposed generating facility until such delivery network upgrades are in service. 36 This process provides an appropriate balance between allowing generators the maximum amount of flexibility with respect to obtaining an expedited interconnection and preserving the efficiency and integrity of the overall interconnection process. Limiting the Independent Study Process to energy-only interconnections is appropriate because a full capacity deliverability assessment involves a much more comprehensive study of a facility's impact on the transmission system, and one that is appropriately done in conjunction with other generators applying for interconnection during the same time period.37

Further, the GIP tariff amendment specifies that extensions of the commercial operation date for interconnection requests under the Independent Study Process will not be granted except for circumstances beyond the control of the interconnection customer.³⁸

2. The Fast Track Process

The ISO and stakeholders determined that they should make the interconnection study process under the GIP more efficient by including in the GIP a modified version of the existing, Commission-approved Fast Track

³⁶ GIP Section 4.6.

Rutty Testimony at 20.

³⁸ GIP Section 4.7.

Process contained in Section 2 of the SGIP.³⁹ The Fast Track Process will benefit interconnection customers with such proposed small generating facilities by permitting them to interconnect to the ISO controlled grid more quickly and through a more streamlined process than would be possible under the standard interconnection study process.⁴⁰

Pursuant to the Fast Track Process under the GIP tariff amendment, the interconnection customer must pay a non-refundable processing fee of \$500 and a study deposit not to exceed \$1,000, which are the same fees set forth in the SGIP (though the SGIP phrases the required study deposit amount as "not to exceed" \$1,000). The proposed small generating facility must also meet the codes, standards, and certification requirements of Appendices 9 and 10 of the GIP, which are the same as the codes, standards, and certification requirements set forth in Attachments 3 and 4 of the SGIP.

Pursuant to both the SGIP and the GIP, the applicable participating transmission owner will perform an initial review of the proposed small generating facility to determine if it passes specified screens and thus is eligible for interconnection under the Fast Track Process.⁴² If the proposed interconnection passes the Fast Track Process screens, and no upgrades are reasonably anticipated, the interconnection request will be approved and the participating transmission owner will provide the interconnection customer with an interconnection agreement for execution.⁴³ If the proposed interconnection fails the screens and no upgrades are reasonably anticipated, but the CAISO and participating transmission owner determine that the small generating facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards under these procedures, the participating transmission owner will provide the interconnection customer with an interconnection agreement for execution.44 If the proposed interconnection passes the screens and upgrades are reasonably anticipated, the ISO and participating transmission owner will provide the interconnection customer with the opportunity to attend a customer options meeting.45

A document showing the Fast Track Process contained in the GIP blacklined against the Fast Track Process currently contained in the ISO's SGIP is included with this filing as Attachment F.

⁴⁰ Rutty Testimony at 21.

⁴¹ GIP Section 5.1.

⁴² GIP Sections 5.2-5.3.1.

⁴³ GIP Section 5.3.2.

⁴⁴ GIP Section 5.3.3.

GIP Section 5.3.4. The customer options meeting is discussed further below.

There are two primary differences between the Fast Track Process under the GIP tariff amendment and the Fast Track Process under the SGIP. The first primary difference is that the SGIP Fast Track Process is available only to proposed small generating facilities that are 2 MW or less in size, whereas the Fast Track Process under the GIP tariff amendment is available to proposed small generating facilities that are 5 MW or less in size. 46 In practice, the ISO has not received any interconnection requests under the Fast Track Process set forth in the SGIP. Therefore, the ISO decided that it would be prudent to review the Fast Track Process, in conjunction with the GIP development process, to determine whether the 2 MW threshold could be increased consistent with the purpose behind the Fast Track Process, so as to make it a more viable option for small generators. 47 The ISO included the 2 MW size limit for the Fast Track Process in the SGIP because that was the size limit set forth in the Commission's Order No. 2006. In Order No. 2006, the Commission explained that it was "retaining the proposed 2 MW threshold for certified generators as a critical eligibility criterion for using the screens" because "filt helps ensure the safety and reliability of the Transmission Provider's electric system."48 However, the proposed 5 MW threshold under the GIP tariff amendment will also be consistent with ensuring the safety and reliability of the transmission provider's electric system, i.e., the ISO controlled grid.

From a transmission engineering perspective, a 5 MW generating facility is relatively small and generally would cause no greater impact than a 2 MW generator, such that including 5 MW facilities in the Fast Track Process will not jeopardize the safety and reliability of the ISO controlled grid. However, it would not be feasible to allow generating facilities larger than 5 MW to participate in the Fast Track Process at this time. In order to consider small generating facilities larger than 5 MW in the Fast Track Process, additional screens would have to be developed to address the complexities involved with analyzing a networked transmission system. Pursuant to these considerations, the ISO and stakeholders determined that it is appropriate to increase the size limit for the Fast Track Process under the GIP tariff amendment to 5 MW, which will make the Fast Track Process available to a larger pool of proposed small generating Facilities. The ISO will continue to examine the operation of the Fast Track Process and, if it is determined that larger facilities can safely be accommodated, will propose such modifications to the GIP at a future time.

GIP Section 5.1.

⁴⁷ Rutty Testimony at 21-22.

⁴⁸ Order No. 2006 at P 172.

⁴⁹ Rutty Testimony at 22-23.

The second primary difference is that the Fast Track Process under the GIP tariff amendment omits several of the screens that apply under the SGIP Fast Track Process. The screens included in the SGIP but not in the GIP tariff amendment are the following:

- The type of interconnection is to a primary distribution line;
- If the proposed small generating facility is to be interconnected on a single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed small generating facility, cannot exceed 20 MW;
- If the proposed small generating facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, the addition will not create an imbalance between the two sides of the 240 volt service of more than 20 percent of the nameplate rating of the service transformer; and
- No construction of facilities by the participating transmission owner on its own system will be required to accommodate the small generating facility.

With respect to the first three of these omitted screens, they do not apply to interconnections to the high voltage transmission system under the ISO's operational control and would never come into play.⁵⁰

With respect to the requirement that no construction facilities by the participating transmission owner on its own system be required to accommodate the small generating facility, this screen is proposed to be eliminated because the ISO does not believe it is appropriate to restrict the Fast Track Process simply because minor network modifications to participating transmission owners' facilities may be required. Tather, as discussed above, the ISO is proposing to amend the Fast Track Process provisions to provide that if the proposed interconnection passes the screens and upgrades are reasonably anticipated, the interconnection customer will be provided with the opportunity to attend a customer options meeting. The customer options meeting will include a review of possible interconnection customer facility modifications or the screen analysis and related results, to determine what further steps are needed to permit the proposed small generating facility to be connected safely and reliably. The

⁵² GIP Section 5.3.4.

Id. at 24.

⁵¹ *Id.*

further steps may include a supplemental review of the proposed small generating facility.⁵³ If transmission upgrades are ultimately determined to be required, then the applicable participating transmission owner shall provide an interconnection agreement to the customer for execution which sets forth the costs associated with the necessary upgrades.

In addition, the Fast Track Process under the GIP tariff amendment differs in minor respects from the Fast Track Process under the SGIP. The SGIP provide that the participating transmission owner will evaluate whether the proposed small generating facility that fails the screens may nevertheless be interconnected consistent with safety, reliability, and power quality standards, and the participating transmission owner conducts any customer options meeting that may be required. The GIP tariff amendment, however, states that both the ISO and the participating transmission owner are involved in these activities. ⁵⁴ Although the SGIP do not specify this, in reality the ISO is a critical participant in the evaluation and customer options meeting under the Fast Track Process. The provisions to the GIP tariff amendment simply reflect that fact.

Another relatively minor difference is that the GIP clarifies that a demonstration of Site Control in the form of site exclusivity is required for an interconnection customer's proposed small generating facility, whereas the SGIP Fast Track Process requires the interconnection customer to demonstrate site control only. The GIP tariff amendment includes the site exclusivity requirement under the Fast Track Process because site exclusivity (or a deposit in lieu of site exclusivity) is required for both large generating facilities and small generating facilities under the other two interconnection processes set forth in the GIP, the Queue Cluster Process and the Independent Study Process. The ISO believes it is prudent to require site exclusivity for small generating facilities under the Fast Track Process as well. The only difference between small generating facilities under the GIP Fast Track Process and other types of generating facilities under the GIP is their size. The smaller size of generating facilities under the GIP Fast Track Process is not a valid reason to exempt them from the site exclusivity requirement.

Finally, the ISO is proposing to extend several of the timeframes in the Fast Track Process relating to steps requiring ISO and participating transmission

GIP Sections 5.4-5.5.

⁵⁴ GIP Sections 5.3-5.4.

⁵⁵ Compare SGIP Section 1.3.5 with GIP Section 5.1(iii).

⁵⁶ GIP Section 3.5.1(iii).

owner review.⁵⁷ The ISO is proposing these extensions because increasing the threshold from 2 to 5 MW and eliminating the screen relating to construction of participating transmission owner's facilities may require more complicated and resource-intensive analyses by the ISO and participating transmission owners.

D. Queue Cluster Timelines

The GIP tariff amendment includes two primary modifications to the cluster study timelines set forth in the current LGIP. First, the GIP considerably shortens the timelines for the Phase I and Phase II interconnection studies. Second, the GIP proposes to establish two application windows for each queue cluster, each of which will remain open for thirty days.⁵⁸

As discussed above, one of the purposes of the GIP tariff amendment is to reduce the amount of time required to process interconnection requests for large generating facilities and small generating facilities. Shortening the timelines for conducting the interconnection studies is part of that effort. To that end, the GIP tariff amendment revises the timelines for the Phase I interconnection study and the Phase II interconnection study by a total of six months. The changes to the timelines are detailed in revised Attachment A of Appendix 4 of the LGIP and in Sections 6.8 and 7.5 of the GIP. Pursuant to the revised timelines, the total number of days for conducting the various steps in the Phase I interconnection study process (i.e., the Phase I Cluster Study, the Short Circuit Duty, facility cost estimates and schedules, the Final Report, and the Final Study Report) will be shortened from 180 days under the current LGIP to 134 days under the GIP. Further, the total number of days for conducting the steps in the Phase II Interconnection Study process (i.e., the Standard Project Refinement and Facilities Study and the Final Plan of Service Report) will be shortened from 330 days under the current LGIP to 196 days under the GIP. Thus, the revised timelines for the Phase I and Phase II interconnection study processes will significantly decrease the number of days for completion of each of these studies.

The revised cluster study timelines under the GIP tariff amendment result in a study process that is approximately three months longer than the process set forth in the ISO's SGIP. The ISO believes that this modest difference in timing is more than made up for by the advantages offered to small generators in the cluster study process, such as greater cost certainty earlier in the process, the

Compare SGIP Section 2.2.2 (stating that interconnection agreement will be forwarded to customer within five Business Days) with GP Section 5.3.2 (stating that interconnection agreement will be forwarded to customer within fifteen Business Days).

A table showing the study timelines for the LGIP and GIP is included as Attachment 1 to Mr. Rutty's testimony.

elimination of delays due to factors such as the interdependency between the LGIP and SGIP and restudies due to project withdrawals, and increased time for small generators to make decisions regarding continuation in the interconnection process after receiving their Phase I study results. As discussed above, given the current volume of SGIP projects, the timelines set forth in the SGIP have become impossible to meet, which further diminishes any meaning that might otherwise be given to the approximately three-month difference in study timing between the GIP and SGIP.⁵⁹

The GIP tariff amendment also revises the provisions in the LGIP on the timing of submissions for interconnection requests in the Queue Cluster. In the current LGIP, the ISO specified three discrete queue clusters along with application windows during which interconnection requests for these queue clusters would be accepted. However, for queue clusters subsequent to these three defined windows, the LGIP specifies that such queue cluster windows will be set forth in a Business Practice Manual. In order to provide customers with more certainty, and due to the shortened study timelines, the GIP tariff amendment proposes to establish fixed dates for queue cluster application windows, with additional study cycle dates to be based off of these application window dates.

Specifically, there will be two "Cluster Application Windows" associated with each interconnection study cycle. The first Cluster Application Window will open on October 15 and close on November 15 of the year prior to the year in which the Interconnection Studies are performed. This first Cluster Application Window will allow customers to submit interconnection requests and receive a scoping meeting, but the studies themselves will not commence until after the closing of the second Cluster Application Window, which will open on March 1 and will close on March 31. The ISO added this feature at the request of stakeholders, who wished an additional opportunity to receive feedback on their interconnection requests prior to the commencement of the next queue cluster. Moreover, the ISO is limiting the application windows to thirty days in duration, based on its experience that the vast majority of interconnection requests have

⁵⁹ Rutty Testimony at 25-26.

⁶⁰ LGIP Section 3.3.

GIP Section 3.3.1. Cluster Application Window is a new defined term added in the GIP tariff amendment to Appendix A of the ISO tariff, which replaces the term "Queue Cluster Window."

Rutty Testimony at 26. However, due to the timing of when the GIP tariff amendment is being filed (October 19, 2010) and its requested effective date (December 19, 2010), there will be only one Cluster Application Window for the ISO's fourth Queue Cluster, which will open on March 1, 2011 and close on March 31, 2011. See GIP Section 3.3.1.

been submitted within the last thirty days of the application windows opened to date. ⁶³

The GIP tariff amendment modifies the timing of a number of due dates in the interconnection request process to accommodate the volume of interconnection requests for large generating facilities and small generating facilities that the ISO anticipates will be submitted after the GIP tariff amendment goes into effect. This volume of interconnection requests will require a modest increase in the amount of time needed to process the interconnection requests. Accordingly, pursuant to the changes contained in the GIP tariff amendment, the ISO will forward a copy of each interconnection request to the applicable participating transmission owner within five business days (rather than the current three business days under the LGIP) of receipt. 64 Also, whenever additional requested information is provided by the interconnection customer, the ISO will notify the interconnection customer within five business days (rather than the current three business days under the LGIP) of receipt of the additional requested information whether the interconnection request is valid. 65 In addition, if an interconnection request has not been deemed valid, the interconnection customer must submit the information necessary to meet the requirements no later than 20 business days (rather than the current 20 calendar days) after the close of the applicable Cluster Application Window or ten business days (rather than the current 10 calendar days) after the ISO first provided notice that the interconnection request was not valid, whichever is later. 66 The ISO believes that these relatively minor increases are justified given the large number of interconnection requests that the ISO and participating transmission owner have received over the past several years, and expect to continue to receive, and are particularly reasonable in light of the significant reductions to the length of the interconnection study cycle that will be implemented in the GIP.

The GIP proposal also adds language to make clear that interconnection customers may submit interconnection requests for processing under the Independent Study Process or the Fast Track Process at any time during the year.⁶⁷

Rutty Testimony at 26-27.

⁶⁴ GIP Section 3.1.

⁶⁵ GIP Section 3.5.2.2.

⁶⁶ GIP Section 3.5.2.2.

GIP Section 3.3.2.

E. Deposit-Related Modifications

The current LGIP states that, to initiate an interconnection request, except with regard to certain small and existing generating facilities, the interconnection customer must submit a \$250,000 interconnection study deposit. The GIP tariff amendment revamps this requirement to state that the interconnection customer must submit an interconnection study deposit equal to \$50,000 plus \$1,000 per megawatt of electrical output of the generating facility, up to a maximum of \$250,000.

The rationale for this revised requirement is that the ISO and stakeholders determined that the amount of the interconnection study deposit should be better calibrated to the size of the proposed generating facility. These tariff changes will mean that the interconnection study deposit amount is "right-sized" for proposed generating facilities that are 200 MW or less, which will provide an incentive for the interconnection customers for those generating facilities to accurately identify the ultimate size of the generating facilities from the start, thus improving the accuracy of the applicable studies. Moreover, with respect to small generators currently processed under the SGIP, this formula results in study deposits that are less than the average cost of studies performed under the SGIP (\$110,000 for a project obtaining all three SGIP studies). For proposed generating facilities that are at least 200 MW, the \$250,000 interconnection study deposit amount set forth in the current LGIP will be preserved (because each such proposed generating facility must pay an interconnection study deposit amount equal to \$50,000 + (\$1,000 x 200) = \$250,000).

Also, the provisions in the LGIP regarding interconnection study deposits currently state that, should an interconnection request be withdrawn within a specified timeframe, the ISO will refund to the interconnection customer the difference between (i) the interconnection customer's interconnection study deposit and (ii) the greater of the costs the ISO and the participating transmission owner have incurred on the interconnection customer's behalf or \$100,000, including interest. The GIP tariff amendment modifies these provisions to state that, if an interconnection request is withdrawn during that timeframe, the ISO will refund to the interconnection customer the difference between (i) the interconnection customer's interconnection study deposit and (ii) the greater of the costs the ISO and the participating transmission owners have incurred on the interconnection customer's behalf or one-half of the original interconnection study

⁶⁸ LGIP Section 3.5.1(i).

⁶⁹ GIP Section 3.5.1(i).

Rutty Testimony at 27.

⁷¹ LGIP Section 3.5.1.2(b).

deposit up to a maximum of \$100,000, including interest.⁷² This new tariff language reflects the more calibrated approach to study deposit requirements that the ISO is proposing to adopt in the GIP, as explained above.

Further, the GIP tariff amendment modifies the provisions in the LGIP regarding the use of interconnection study deposits. As modified, the provisions state that the interconnection study deposits will be refundable in specified circumstances, except with regard to proposed generating facilities processed under the Fast Track Process.⁷³ The provisions regarding the interconnection study deposits have been modified to apply to the studies and meetings applicable to proposed generating facilities processed under the Independent Study Process.⁷⁴

The current LGIP also states that each interconnection customer must demonstrate site exclusivity or post a site exclusivity deposit of \$250,000.⁷⁵ The ISO and stakeholders determined that this site exclusivity deposit amount was too much for proposed small generating facilities. Therefore, the GIP tariff amendment modifies the current requirement to state that the interconnection customer must demonstrate site exclusivity or, for interconnection requests in a queue cluster, must post a site exclusivity deposit of \$100,000 for a small generating facility or \$250,000 for a large generating facility.⁷⁶ This modification appropriately balances the need to encourage developers to obtain site exclusivity early in the interconnection process and the need to avoid imposing an unreasonable financial burden on smaller projects.⁷⁷

F. Interconnection Financial Security

The ISO believes it is important that small generators be required to post interconnection financial security in advance of the construction of transmission upgrades for the same reasons that the ISO implemented financial security requirements for large generators as part of the GIPR Amendment: in order to ensure that developers have sufficient "skin in the game" such that they are encouraged to make decisions regarding the status of their projects as early in the process as possible. This reduces the incentive for non-viable projects to

⁷² GIP Section 3.5.1.1(b).

⁷³ GIP Section 3.5.1.1.

⁷⁴ GIP Section 3.5.1.1.

LGIP Section 3.5.1.

⁷⁶ GIP Section 3.5.1(iii).

⁷⁷ Rutty Testimony at 29.

remain in the interconnection queue after the completion of the Phase I interconnection study, at which point generators should have a reasonable estimate as to their responsibility for upgrade costs. This is particularly important given the high volume of small generator requests that the ISO has received over the past two years, and expects to continue to receive over the next several years.⁷⁸

The ISO recognizes, however, that the need to promote rational and early decision-making by developers must be appropriately balanced against the need to avoid creating financial barriers that work to discourage the entry of viable projects into the interconnection queue, particularly for smaller projects that may not have the capital and financing resources available to larger developers. After discussing this issue with stakeholders in the GIP stakeholder process, the ISO concluded that although small generators should be subject to financial security requirements, the minimum financial security should be reduced for small generators, and moreover, that all generators should be subject to a cap on their second posting of financial security, with small generators subject to a smaller cap relative to large generators. The ISO further worked with stakeholders to develop the specific financial security requirements for small generators which the ISO believes represent an appropriate balance between ensuring that small generators have enough "skin in the game" without discouraging small generators from seeking interconnection. Therefore, under the GIP tariff amendment, small generators studied in a queue cluster or under the Independent Study Process (but not under the Fast Track Process) will be required to post interconnection financial security under the same schedule as large generators, but under revised formulas for determining security for network upgrade costs, in order to reduce the financial burden on small generators.

The current provisions in the LGIP regarding the initial posting of interconnection financial security will continue to apply to interconnection customers that have proposed large generating facilities in the interconnection queue and will also now apply to interconnection customers with proposed large generating facilities in the Independent Study Process. Specifically, each such interconnection customer will be required to post an interconnection financial security instrument in an amount equal to the lesser of (i) fifteen (15) percent of the total cost responsibility assigned to the interconnection customer in the final Phase I interconnection study or system impact study for network upgrades, (ii) \$20,000 per megawatt of electrical output of the 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, including any requested modifications thereto, or (iii) \$7,500,000, but in

⁷⁸ *Id.* at 30-31.

⁷⁹ *Id.* at 31.

no event less than \$500,000.⁸⁰ Under the GIP tariff amendment, each interconnection customer for a small generating facility assigned to a Queue Cluster or in the Independent Study Process will be required to make a similar initial posting of interconnection financial security. Specifically, each such interconnection customer will be subject to the same initial posting requirements applicable to large generating facilities, except that the minimum initial posting requirement is \$50,000 for the small generating facilities.⁸¹

The provisions in the LGIP regarding second postings of interconnection financial security will continue to apply to interconnection customers that have large generating facilities assigned to a Queue Cluster and will also now apply to interconnection customers with large generating facilities in the Independent Study Process. The GIP tariff amendment also adds caps on financial security requirements for the second posting, for both large and small generators. Pursuant to the GIP tariff amendment, each interconnection customer for a large generating facility will be required to post an interconnection financial security instrument in an amount equal to the lesser of (i) \$15 million or (ii) 30 percent of the total cost responsibility assigned to the interconnection customer for network upgrades in the final Phase I interconnection study, the final Phase II interconnection study, the system impact study, or the facilities study, whichever is lower. In no event will the total amount posted be less than \$500,000.

Under the GIP tariff amendment, an interconnection customer for a small generating facility assigned to a queue cluster or in the independent study process will be required to make a smaller second posting of interconnection financial security. Specifically, each such interconnection customer will be required to make a second posting to increase its interconnection financial security to a dollar amount that is the lesser of (i) \$1 million or (ii) 30 percent of the total cost responsibility assigned to the interconnection customer for network upgrades in the final Phase I interconnection study, the final Phase II interconnection study, the system impact study, or the facilities study, whichever is lower. In no event will the total amount posted be less than \$100,000.⁸³

Further, the GIP tariff amendment modifies the ISO tariff to set forth timelines for interconnection customers in the Independent Study Process to post their interconnection financial security instruments and to receive partial refunds

⁸⁰ GIP Section 9.2.3.

GIP Section 9.2.3. The \$7.5 million limit on the first posting is also removed as irrelevant for small generators, as it would be impossible for any plant 20 MW or smaller to reach that amount at a rate of \$20,000 per MW.

⁸² GIP Section 9.3.1.2.

⁸³ GIP Section 9.3.1.2.

of their interconnection financial security in the event they withdraw their interconnection requests or terminate their interconnection agreements. These timelines are shorter than the amounts of time required for these activities for interconnection customers in a Queue Cluster⁸⁴ because of the overall expedited timeline for studying and interconnecting generators under the Independent Study Process in relation to the Cluster Study Process.

The GIP tariff amendment also adds provisions to clarify that, if the costs of the actual estimated network upgrades are less than the minimum posting amount, the posting amount required will be equal to the actual estimated network upgrade amount. This ensures that both small and large generator interconnection customers will not be required to post financial security in excess of the total amount of network upgrade costs, which the ISO believes would be an unreasonable result. Believes would be an unreasonable result.

Lastly, the GIP tariff amendment includes some minor clarification changes regarding interconnection financial security. First, the amendment modifies the tariff provisions regarding the third posting of interconnection financial security to add language stating that the provisions apply to both interconnection customers in the Queue Cluster process and interconnection customers in the Independent Study Process.⁸⁷ The GIP tariff amendment also reorganizes the provisions relating to the first and second postings of interconnection financial security in order to improve flow and readability.⁸⁸

G. Additional Deliverability Assessment Options

Section 6 of the current LGIP includes provisions regarding on-peak and off-peak deliverability assessments for interconnection customers selecting full capacity deliverability status in their interconnection requests. As discussed further in the testimony of Robert Sparks, ⁸⁹ the GIP tariff amendment provides additional deliverability assessment options in new Section 8 of the GIP. Specifically, the GIP tariff amendment gives large generating facilities that were previously studied as energy-only deliverability status, as well as small generating facilities studied under the SGIP, the option, on either a one-time or

⁸⁴ GIP Sections 9.4.2.1 and 9.4.2.2.

⁸⁵ GIP Sections 9.2.3 and 9.3.1.2.

⁸⁶ Rutty Testimony at 32.

⁸⁷ GIP Section 9.3.2.

⁸⁸ GIP Sections 9.2 and 9.3.1.

⁸⁹ Sparks Testimony at 12-18.

an annual basis, to be studied for full capacity deliverability status. ⁹⁰ This process will permit those generators to obtain full capacity deliverability status that would otherwise be unavailable to them. This option will be particularly valuable to small generators that have already interconnected through the SGIP process, which does not provide an option for full capacity deliverability. ⁹¹

Generating facilities that meet the eligibility requirements for the one-time full capacity deliverability option must make their elections within the Cluster Application Window for the ISO's fourth Queue Cluster, which will open on March 1, 2011, and any interconnection customers selecting this option will be studied as part of the Phase I and Phase II interconnection studies for the ISO's fourth Queue Cluster. Interconnection customers electing the one-time option will be required to post an interconnection study deposit, less any study deposit amounts already paid if the interconnection customer's generating facility is still active in the ISO's interconnection queue (*i.e.*, it has not yet signed an interconnection agreement). The determination and allocation of costs relating to any delivery network upgrades identified as part of this process will be done pursuant to the standard provisions included in the cluster study sections of the GIP. The ISO believes it is appropriate to provide this one-time option because of the increased emphasis on generator deliverability in the past several years, particularly in light of resource adequacy initiatives.

Generating facilities that meet the eligibility requirements for the annual full capacity deliverability option will be studied to determine if they can be designated for full capacity deliverability status using available transmission capacity. An interconnection customer must make such request within a Cluster Application Window, beginning with the Cluster Application Window for the ISO's fifth Queue Cluster, which will open on March 1, 2012. Any interconnection customer selecting this option will be studied immediately following the Phase II interconnection studies associated with the Queue Cluster during which the interconnection customer submits its request, typically June through August annually. Interconnection customers that wish to participate in this annual

⁹⁰ GIP Sections 8.1-8.2.

Sparks Testimony at 12; Rutty Testimony at 32.

⁹² GIP Sections 8.1.2 and 8.1.3.

⁹³ GIP Section 8.1.4.

⁹⁴ Sparks Testimony at 13.

⁹⁵ GIP Section 8.2.1.

⁹⁶ GIP Section 8.2.2.

process must submit an interconnection request as set forth in Appendix 1 to the GIP along with a non-refundable \$10,000 study fee. ⁹⁷ After reviewing several different options during the development of the GIP proposal, the ISO determined that this study fee amount represents a reasonable average of the costs associated with analyzing the ISO controlled grid to determine what available transmission capability could be used to provide eligible generators with deliverability. ⁹⁸

After allocating transmission system capability, including both capability associated with existing capability and capability relating to approved transmission upgrades, to interconnection customers in the Queue Cluster who originally requested full capacity deliverability status in the Phase II interconnection study, the ISO will perform additional studies using the deliverability study procedures set forth in Section 6.5.2 of the GIP to determine the availability of any remaining transmission system capability for those interconnection customers requesting full capacity deliverability status as part of the annual process. ⁹⁹ In determining available transmission capability, priority will be given to interconnection customers whose generating facilities have the lowest transfer distribution factors on the transmission constraint that is limiting deliverability, calculated according to the deliverability study procedures set forth in Section 6.5.2 of the GIP. ¹⁰⁰

Providing deliverability priority to generators with the lowest transfer distribution factors on the transmission constraint that is limiting the deliverability of the generators is a reasonable methodology for allocating remaining transmission capability, because it will result in creating the maximum amount of available generation capacity available for generators to offer to load serving entities to meet their resource adequacy planning needs, thereby maximizing the efficient use of the ISO controlled grid.¹⁰¹

If there is sufficient remaining available transmission capability for the interconnection customer to deliver the full output of its generating unit, then the interconnection customer's generating facility will be considered to have full capacity deliverability status. ¹⁰² If the assessment of available transmission

⁹⁷ GIP Section 8.2.3.

Sparks Testimony at 14.

⁹⁹ GIP Section 8.2.4.

GIP Section 8.2.4.1.

Sparks Testimony at 15.

GIP Section 8.2.4.2.

capability indicates that there is some transmission capacity available for use by the interconnection customer, but less than is necessary to deliver the full output of the interconnection customer's generating facility, then the interconnection customer's generating facility will be considered to be partially deliverable, and the amount of transmission capability made available to that interconnection customer's generating facility will be equal to the determination of available capacity for the generating facility rounded down to the nearest 50 MW increment. ¹⁰³

The ISO is proposing to make such remaining transmission capability available in 50 MW increments in order to ensure that the ISO does not allocate for deliverability purposes all of the existing capability of the transmission system, in order to ensure that the system has sufficient overall "headroom." Retaining sufficient headroom is important so that the deliverability of generators that have already obtained deliverability is minimally impacted by subsequent new generation additions. If the ISO were to make all transmission capability available to generators through partial deliverability, the ISO's flow models would show that transmission constraints are at 100 percent of their limits. As a result, when the ISO conducts its annual deliverability assessments to determine the net qualifying capacity of generators, it is very likely that even small incremental changes in load growth and transmission expansion (which are common) will require reductions to numerous generators' net qualifying capacity.

Although the ISO recognizes that some changes to net qualifying capacity are acceptable, the ISO believes that frequent reductions to numerous generators' net qualifying capacity will be disruptive to both generators and load serving entities, because a generator's net qualifying capacity is a key term in many of the commercial arrangements and contracts underlying the resource adequacy and RPS regimes. Moreover, if the ISO was to allocate all of the available capability as part of this annual process, generators electing to be studied as full capacity deliverability projects with very small flow impacts (less than five percent) on electrically distant lines loaded to 100 percent would require reductions in deliverability to generators electrically close to those constraints. This is because ISO deliverability procedures do not require generators with flow impacts of less than five percent of the generators' output on a transmission constraint to pay for upgrades on that constraint. For these reasons, the ISO believes that the best balance between providing some deliverability to generators that do not qualify for full capacity deliverability status and retaining

transmission capability is available to that facility, the ISO will provide 50 MW of transmission capability for purposes of determining the generator's deliverability.

GIP Section 8.2.4.3. For example, if a 60 MW generating facility requests full capacity deliverability in the annual assessment process, and the ISO determines that 55 MW of

sufficient headroom on the ISO controlled grid is to allocate partial deliverability in the annual process on the basis of 50 MW increments. 104

In addition, the GIP tariff amendment provides that, to the extent that a participating transmission owner's tariff provides the option for customers taking interconnection service under the participating transmission owner's tariff to obtain full capacity deliverability status, the ISO will, in coordination with the applicable participating transmission owner, perform any necessary deliverability studies. This provision ensures that any such deliverability analysis will include the input of both the ISO and the applicable participating transmission owner. Further, the ISO will execute any necessary agreements for reimbursement of study costs it incurs and to assure cost attribution for any network upgrades relating to any deliverability status conferred to such customers under the participating transmission owner's tariff. 106

The GIP tariff amendment also proposes to revise Section 40.4.6.1 of the ISO tariff to state that, for resource adequacy resources ¹⁰⁷ in the same electrical group which have identified deliverability constraints, the qualifying capacity ¹⁰⁸ of the resource adequacy resources that obtained full capacity deliverability status or partial deliverability through the annual full capacity deliverability option set forth in Section 8.2 of the GIP will be reduced prior to reducing the Qualifying Capacity of those resources which were originally provided full capacity deliverability status pursuant to inclusion in an interconnection study cycle under the LGIP. This priority is reasonable because resources electing and receiving full capacity deliverability status through the standard interconnection study procedures are responsible for paying the costs of any upgrades necessary to obtain such deliverability, while resources obtaining deliverability through the option for annual full capacity deliverability discussed above are making use of remaining transmission capability on an "as is" basis for only the cost of the

Sparks Testimony at 16-18.

GIP Section 8.3. The participating transmission owner tariff that would provide this option is the Wholesale Distribution Access Tariff ("WDAT"). One of the participating transmission owners, Southern California Edison Company, recently instituted a stakeholder process to revise its WDAT.

GIP Section 8.3.

A resource adequacy resource is defined in Appendix A of the ISO tariff as a resource that is designated in an investor-owned utility supply plan to provide resource adequacy capacity. The criteria for determining the types of resources that are eligible to provide qualifying capacity are established by the CPUC (or other applicable local regulatory authority).

Qualifying capacity is defined in Appendix A of the ISO tariff as the maximum capacity of a resource adequacy resource. The criteria for calculating qualifying capacity from resource adequacy resources are established by the CPUC (or other applicable local regulatory authority).

study.¹⁰⁹ The GIP tariff amendment also revises Section 40.4.6.1 to state that resources will be electrically grouped in a manner consistent with the deliverability assessment methodology posted on the ISO website.

H. Transition of Existing SGIP Interconnection Requests to the GIP

There are a number of existing interconnection requests submitted pursuant to the SGIP that need to be transitioned to the new GIP regime. The provisions regarding the transitioning of SGIP interconnection requests to the GIP are contained in new Appendix 8 of the GIP. Appendix 8 includes two new defined terms: (1) the "SGIP Serial Study Group," defined as those interconnection customers with valid interconnection requests submitted pursuant to the SGIP prior to December 19, 2010 (i.e., the proposed effective date of the GIP tariff amendment) and who have executed system impact study or facilities study agreements providing for the completion of such studies by December 19, 2010; and (2) the "SGIP Transition Cluster," defined as those interconnection customers with valid interconnection requests submitted pursuant to the SGIP prior to December 19, 2010 and which have not executed system impact study or facilities study agreements providing for the completion of such studies by December 19, 2010. The purpose of these defined terms is to distinguish between "late stage" interconnection requests (the SGIP Serial Study Group) and "early stage" interconnection requests (the SGIP Transition Cluster).

An interconnection request deemed to be included in the SGIP Serial Study Group that wishes to be studied as an energy-only deliverability status generating facility will not be required to conform to the provisions of the GIP. Rather, such interconnection requests will continue to be processed per the procedures set forth in the SGIP, unless they specifically indicate, in writing, within five business days from the effective date of Appendix 8, that they wish either to be included in the SGIP Transition Cluster, studied for full capacity deliverability status, or, if eligible, studied under the Independent Study Process set forth in the GIP.¹¹¹ An interconnection request deemed to be included in the SGIP Serial Study Group that wishes to be studied as a full capacity deliverability status generating facility will continue to be processed per the procedures set forth in the SGIP for energy-only deliverability, with a full capacity deliverability assessment to be performed as part of the next interconnection study cycle

See Sparks Testimony at 16.

GIP Appendix 8, Section 1.2.2.

GIP Appendix 8 Section 2.1.

following the completion of the serial portion of the generating facility's studies pursuant to Appendix 8. 112

An interconnection request deemed to be included in the SGIP Transition Cluster (including those generating facilities defined as part of the SGIP Serial Study Group who choose to be processed in the SGIP Transition Cluster) that wishes to be studied as a generating facility with energy-only deliverability status will be processed per the procedures set forth in the GIP and studied as part of the Phase II interconnection study for the ISO's first and second Queue Clusters, which is scheduled to begin on January 1, 2011 and be completed on July 31, 2011. Alternatively, interconnection requests deemed to be included in the SGIP Transition Cluster may, by indicating in writing, within five business days from the effective date of Appendix 8, elect to be studied for full capacity deliverability status, or, if eligible, as part of the Independent Study Process set forth in the GIP. 113 An interconnection request deemed to be included in the SGIP Transition Cluster that wishes to be studied as a full capacity deliverability status generating facility will be studied for energy-only deliverability as part of the Phase II interconnection study for the ISO's first and second Queue Clusters, with a full capacity deliverability assessment to be subsequently performed as part of the ISO's fourth Queue Cluster, which is scheduled to begin on June 1, 2011.¹¹⁴

An interconnection customer in the SGIP Transition Cluster must post, within 30 calendar days of the effective date of Appendix 8, all of the following: (i) an interconnection study deposit equal to the amount set forth in Section 3.5.1 of the GIP, if it has not done so already; and (ii) a demonstration of site exclusivity, if it has not done so already. An interconnection customer that does not satisfy these posting requirements will be withdrawn from the SGIP Transition Cluster. An interconnection customer who withdraws from the SGIP Transition Cluster will be refunded the entire amount of its interconnection study deposit upon withdrawal, less any amounts that the ISO and participating transmission owners have incurred in performing studies on the interconnection customer's behalf. 115 At the conclusion of the Phase II interconnection study for the ISO's first and second Queue Clusters, each interconnection customer remaining in the SGIP Transition Cluster will receive a Phase II interconnection study report, which will indicate each interconnection customer's allocated share of costs for interconnection facilities and reliability network upgrades. If the interconnection customer wishes to continue in the queue, it must execute a small generator

GIP Appendix 8, Section 2.2.

GIP Appendix 8, Section 3.1.

GIP Appendix 8, Section 3.2.

GIP Appendix 8, Section 3.3.

interconnection agreement within 90 calendar days of receiving the final report and must post the required interconnection financial security. 116

The ISO will attempt to study the SGIP Serial Study Group prior to studying the SGIP Transition Cluster. To the extent that is not practicable, the ISO will study all of the existing SGIP interconnection requests as expeditiously as possible based on the most recent base case data. If the ISO anticipates that it will not be able to complete the studies for all SGIP Serial Study Group projects prior to commencing study of the SGIP Transition Cluster, the ISO will, at that time, notify any SGIP Serial Study projects that it believes it will not be able to complete before the SGIP Transition Cluster, and provide those customers the opportunity to switch to the SGIP Transition Cluster.¹¹⁷

The ISO is defining the SGIP Serial Group and SGIP Transition Cluster in this manner for two reasons. First, the ISO needs to reduce the number of interconnection requests that it will continue to process under the SGIP in order to allow it to process these remaining requests within a reasonable timeframe. Likewise, the ISO believes that deferring interconnection requests in earlier stages of the process until later queue clusters will give those customers the best chance to achieve commercial operation at an earlier date than would be possible under the current serial process. At the same time, however, the ISO recognizes that customers with later-stage interconnection requests may have placed an increased level of reliance on the existing SGIP procedures, such that moving such requests into the new process could cause them substantial disruption. The ISO believes that a reasonable demarcation point between earlier and late stage requests is whether customers have executed a system impact or facilities study agreement providing for the completion of such an agreement prior to the implementation of the GIP proposal, because such customers would be expected to receive their study results under the process set forth in the SGIP prior to the implementation of the GIP procedures. 118

It is therefore reasonable to include in the GIP procedures those customers that have submitted interconnection requests in the SGIP, but have not signed a system impact or facilities study agreement indicating a completion date prior to the effective date of the GIP. Nevertheless, the ISO believes that because these customers have already submitted interconnection requests, that they should be processed through the cluster study procedures as soon as possible. Therefore, the ISO is proposing to include these SGIP Transition Cluster requests in the Phase II interconnection study for the first and second

GIP Appendix 8, Section 3.4.

¹¹⁷ Rutty Testimony at 34-35.

¹¹⁸ *Id.* at 33-34.

Queue Clusters. This somewhat truncated study procedure is reasonable and appropriate given that it will only involve an energy-only deliverability assessment and therefore, will be less complicated in scope and execution.¹¹⁹

I. Generator Interconnection Agreement

The GIP tariff amendment adds to the Master Definitions Supplement contained in Appendix A of the ISO tariff the new term "Generator Interconnection Agreement," which is defined to mean the form of interconnection agreement applicable to an interconnection request pertaining to a generating facility processed under the interconnection procedures set forth in Appendix Y of the ISO tariff. The definition specifies that, for a large generating facility, a pro forma version of the interconnection agreement is set forth in Appendix Z of the ISO tariff, and for a small generating facility, a pro forma version of the interconnection agreement is set forth in Appendix T of the ISO tariff. The ISO proposes to make minor and ministerial revisions to the SGIP contained in Appendix T and the LGIP contained in Appendix Z to conform them to the definition of a Generator Interconnection Agreement and the other components of the GIP tariff amendment.

Because the ISO is already modifying the SGIA in this GIP tariff amendment, the ISO is also taking this opportunity to delete Article 1.5.7 and Attachment 8 from the SGIA, and to make conforming revisions to Article 12.12 of the SGIA, pursuant to a letter dated September 29, 2010 from the Western Electricity Coordinating Council ("WECC") notifying the ISO of its intent to terminate its Reliability Management System ("RMS") agreement and reliability criteria agreement with the ISO. On October 11, 2010, WECC also filed with the Commission a notice of proposed cancellation of its RMS agreement originally filed in Docket No. ER99-3396-000. WECC has represented in its letter to the ISO that the RMS served as a predecessor to the mandatory reliability standards approved by the Commission under its authority pursuant to Section 215 of the Federal Power Act (16 U.S.C. §8240) and that the Commission's approval of these standards has rendered the RMS redundant for users, owners, and operators of the bulk power system in the United States. In its notice of proposed cancellation filed with the Commission, WECC has made a similar representation that the RMS has been rendered obsolete.

The provisions of Article 1.5.7 and Attachment 8 of the SGIA incorporate an RMS agreement to be entered into between the ISO and the interconnection customer to bind the interconnection customer to comply with WECC RMS requirements applicable to generators. The ISO has incorporated this agreement into the SGIA for no purpose other than to satisfy the requirements of its own RMS agreement with WECC. As the ISO's RMS agreement with WECC will be

terminating, and as WECC has represented that the RMS is redundant to the mandatory reliability standards and is obsolete, the ISO sees no further purpose in requiring interconnection customers to enter into the RMS agreement for generators incorporated in Attachment 8. For this reason, the ISO proposes to delete the provisions of Article 1.5.7 and Attachment 8 from the SGIA, and to make conforming revisions to Article 12.12.

J. Conforming and Miscellaneous ISO Tariff Changes

The GIP tariff amendment includes a number of changes that need to be made to various ISO tariff provisions to bring them into conformance with the GIP tariff amendment.

First, the GIP tariff amendment modifies Appendix A of the ISO tariff to include the following new defined terms included in the GIP tariff amendment that are also discussed above in this transmittal letter: Cluster Application Window, Generator Interconnection Agreement, Generator Interconnection Procedures, and Queue Cluster. The GIP tariff amendment also includes minor revisions to a number of existing defined terms in Appendix A to align those terms with the provisions of this tariff amendment. Similarly, the GIP tariff amendment includes non-substantive modifications to Sections 24 and 25 of the ISO tariff to conform them to the GIP tariff amendment.

The GIP tariff amendment also contains revisions to Section 2.3 of the LGIP to modify the provisions therein regarding the set of updated interconnection base case data that the ISO will publish prior to the Phase I interconnection study, after the Phase I interconnection study, prior to the Phase II interconnection study, and after the Phase II interconnection study. As modified, Section 2.3 states that the ISO, in coordination with applicable participating transmission owners, will publish updated interconnection base case data during those intervals that include generation reflected in valid interconnection requests submitted in the cluster application windows for the interconnection study cycle, as well as all generation reflected in the interconnection requests in the Independent Study Process that entered the ISO's interconnection queue prior to the creation of the base case, along with any associated transmission upgrades or additions. This conforms the publication of base case data to the revised cluster study timelines included in the GIP.

The GIP tariff amendment modifies the Internet posting provisions in Section 3.6 of the LGIP to state that the ISO will post to the secure CAISO Website portions of the Phase I interconnection study that do not contain customer-specific information following the final results meeting and portions of

¹²⁰

the Phase II interconnection study that do not contain customer-specific information no later than publication of the final ISO transmission plan. These tariff changes simply clarify the nature of the information the ISO will post and the location where that information will be posted.

The GIP tariff amendment revises the interconnection application process, including the application form set forth in Appendix 1 of the LGIP, to apply to all interconnection requests, including those for the Queue Cluster, the Independent Study Process, and the Fast Track Process, as well as for the one-time deliverability assessment and annual deliverability assessment set forth in the GIP tariff amendment. Pursuant to those tariff changes, the GIP tariff amendment also eliminates provisions in the LGIP that apply specifically to the initiation or withdrawal of an interconnection request for certain small and existing generating facilities. In addition, pursuant to stakeholder request, the GIP tariff amendment modifies Attachment A to Appendix 1 of the LGIP to clarify the technical information that the ISO requires from generators.

The GIP tariff amendment also incorporates into new Appendix 7 of the LGIP the application, procedures, and terms and conditions for interconnecting a certified inverter-based small generating facility no larger than 10 kW, which are also contained in Attachment 5 of the existing SGIP. These provisions are unchanged from the SGIP, and will provide a further option for small generators interconnecting under the GIP. Further, the GIP tariff amendment deletes outdated provisions contained in Appendix 5 of the LGIP.

V. Stakeholder Process

In April 2010, the ISO established the stakeholder process that led to this GIP tariff amendment. Pursuant to the discussions with stakeholders over the following months, the ISO developed the Generator Interconnection Procedures contained in the tariff amendment. At its September 9, 2010 meeting, the ISO Governing Board authorized the ISO to prepare and file this Generator Interconnection Procedures tariff amendment.

The ISO held five meetings and conference calls with stakeholders to discuss the issues and implementation details regarding the Generator Interconnection Procedures, including a conference call to discuss the draft tariff language that the ISO shared with stakeholders. The ISO and stakeholders also held four working group meetings to discuss the Generator Interconnection

¹²¹ GIP Section 3.5.1(ii).

See deleted LGIP Section 3.5.1.1.

Rutty Testimony at 37.

Procedures. The ISO also produced several written proposals for stakeholder review during this process, including an issues paper on April 14, a straw proposal on May 27, a draft final proposal on July 20, and an addendum to that final proposal on August 13. Further, the ISO solicited written comments and suggested edits to the draft tariff language from stakeholders, which it used to formulate its final proposal as contained herein. 124

The ISO believes that this robust process has led to a GIP that best reflects the needs of all parties to the interconnection process, including both small and large generator developers, transmission owners, and California ratepayers. Indeed, although the ISO was not able to achieve consensus on every individual issue, the vast majority of developers, including small renewable developers, have indicated their support for the overall direction of the GIP proposal, particularly the decision to implement an integrated clustered study approach as the default option for all generators.

VI. Effective Date

The ISO requests that the Commission accept the Generator Interconnection Procedures effective as of December 19, 2010, *i.e.*, sixty-one days after the filing of this tariff amendment.

The ISO has provided, in Attachment E to the instant filing, a listing of the key dates in the stakeholder process and electronic links to documents on the ISO's website concerning the Generator Interconnection Procedures.

VII. Communications

Communications regarding this filing should be addressed to the following individuals, whose names should be placed on the official service list for this proceeding:

Nancy Saracino
General Counsel
Sidney M. Davies
Assistant General Counsel
Baldassaro "Bill" Di Capo*
Senior Counsel

Michael Kunselman*

Bradley R. Miliauskas

California Independent System Operator Corporation 151 Blue Ravine Road

Folsom, CA 95630 Tel: (916) 351-4400 Fax: (916) 608-7296

Alston & Bird LLP

The Atlantic Building 950 F Street, NW Washington, DC 20004 Tel: (202) 756-3300 Fax: (202) 756-3333

E-mail:

nsaracino@caiso.com sdavies@caiso.com bdicapo@caiso.com

E-mail:

michael.kunselman@alston.com bradley.miliauskas@alston.com

VIII. Service

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

IX. Attachments

The following documents, in addition to this transmittal letter, support this filing:

Attachment A Revised ISO tariff sheets that incorporate the proposed changes described above

^{*} Individuals designated for service pursuant to Rule 203(b)(3), 18 C.F.R. § 385.203(b)(3

Attachment B Proposed changes to the ISO tariff shown in black-

line format

Attachment C Prepared Direct Testimony of Stephen Rutty,

Manager of Grid Assets at the ISO

Attachment D Prepared Direct Testimony of Robert Sparks,

Manager of Regional Transmission (South) at the ISO

Attachment E Table summarizing key dates in the ISO's GIP

stakeholder process

Attachment F Fast Track Process included in Section 5 of the GIP

blacklined against Fast Track Process currently

included in the ISO's SGIP

X. Conclusion

For the foregoing reasons, the Commission should accept the proposed tariff changes contained in the instant GIP tariff amendment effective as of December 19, 2010, as requested by the ISO. Please contact the undersigned if you have any questions regarding this matter.

Respectfully submitted,

Michael Kunselman

Nancy Saracino Michael Kunselman

General Counsel
Sidney M. Davies
Assistant General Counsel

Baldassaro "Bill" Di Capo

Senior Counsel

Bradley R. Miliauskas

California Independent System Operator Corporation

151 Blue Ravine Road Folsom, CA 95630 Alston & Bird LLP
The Atlantic Building
950 F Street, NW
Washington, DC 20004

Counsel for the California Independent System Operator Corporation

Attachment A – Clean Tariff

Generator Interconnection Procedures Tariff Amendment

California Independent System Operator Corporation

Fifth Replacement FERC Electric Tariff

* *

24.1.2 Reliability Driven Projects

The CAISO, in coordination with each Participating TO with a PTO Service Territory will, as part of the Transmission Planning Process and consistent with the procedures set forth in the Business Practice Manual, identify the need for any transmission additions or upgrades required to ensure System Reliability consistent with all Applicable Reliability Criteria and CAISO Planning Standards. In making this determination, the CAISO, in coordination with each Participating TO with a PTO Service Territory and other Market Participants, shall consider lower cost alternatives to the construction of transmission additions or upgrades, such as acceleration or expansion of existing projects, Demand-side management, Remedial Action Schemes, appropriate Generation, interruptible Loads or reactive support. The CAISO shall direct each Participating TO with a PTO Service Area, as a registered Transmission Planner with NERC, to perform the necessary studies, based on the Unified Planning Assumptions and Study Plan as set forth in Section 24.2.3, any applicable Interconnection Study, and in accordance with the Business Practice Manual, to determine the facilities needed to meet all Applicable Reliability Criteria and CAISO Planning Standards. The Participating TO with a PTO Service Area shall provide the CAISO and other Market Participants with all information relating to the studies performed under this Section, subject to any limitation provided in Section 20.2, the LGIP set forth in Appendix U, or the GIP set forth in Appendix Y. Based on the study results, and as part of the Transmission Planning Process described in the Business Practice Manual, the CAISO, CEC, CPUC, Project Sponsors and other Market Participants shall be free to propose any transmission upgrades or additions deemed necessary to ensure System Reliability consistent with Applicable Reliability Criteria and CAISO Planning Standards. The Participating TO with a PTO Service Territory in which the transmission upgrade or addition deemed needed under this Section 24.1.2 is to be located shall be the Project Sponsor, with the responsibility to construct, own and finance, and maintain such transmission upgrade or addition.

* * *

24.1.3.2 Demonstration of Interest in a Location Constrained Resource Interconnection Facility A proponent of an LCRIF must demonstrate interest in the LCRIF equal to sixty percent (60%) or more of the capacity of the facility in the following manner:

- (a) the proponent's demonstration must include a showing that LCRIGs that would connect to the facility and would have a combined capacity equal to at least twenty-five percent (25%) of the capacity of the facility have executed Large Generator Interconnection Agreements, Small Generator Interconnection Agreements, or Generator Interconnection Agreements, as applicable; and
- (b) to the extent the showing pursuant to Section 24.1.3.2(a) does not constitute sixty percent (60%) of the capacity of the LCRIF, the proponent's demonstration of the remainder of the required minimum level of interest must include a showing that additional LCRIGs:
 - (1) in the case of Generating Facilities subject to the GIP set forth in Appendix Y, have obtained Site Exclusivity or paid the Site Exclusivity Deposit in lieu of Site Exclusivity, provided that any Site Exclusivity Deposit paid pursuant to Section 3.5 of the GIP set forth in Appendix Y shall satisfy this requirement, or, in the case of Large Generating Facilities subject to the LGIP set forth in Appendix U and Small Generating Facilities subject to the SGIP set forth in Appendix S, have obtained control over their site or paid a deposit to the CAISO in the amount of \$250,000, which deposit shall be refundable if the LCRIF is not approved or is withdrawn by the proponent; and
 - (2) have demonstrated interest in the LCRIF by one of the following methods:
 - executing a firm power sales agreement for the output of the LCRIG for a period of five years or longer; or
 - (ii) in the case of Generating Facilities subject to the GIP set forth in Appendix Y, filing an Interconnection Request and paying the Interconnection Study Deposit required by Section 3.5 of the GIP set forth in Appendix Y; or

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

* * *

24.2.3 Request Window

All requests for Economic Planning Studies and transmission upgrades or additions must be submitted by Participating TOs, Market Participants, CPUC, CEC, or Project Sponsors through the Request Window, in accordance with Section 24 and the Business Practice Manual, to be considered for inclusion in the annual Transmission Plan. The Request Window will occur in the year prior to the year in which the Transmission Plan is prepared. The duration of the Request Window will be set forth in the Business Practice Manual; provided, however, that the Request Window will not close earlier than six weeks after participating TOs have submitted reliability projects and mitigation solutions that respond to the CAISO technical studies or technical studies conducted at the direction of the CAISO. All proposals submitted through the Request Window must use the forms and satisfy the information and technical requirements set forth in the Business Practice Manual. Proposals for transmission additions or upgrades must be within or connect to the CAISO Balancing Authority Area or CAISO Controlled Grid and proposals for Economic Planning Studies must be intended to promote competition or economic efficiency of serving Load within the CAISO Balancing Authority Area, but may relate to Congestion relief or transmission capacity expansion outside the CAISO Balancing Authority Area. The following proposals will only be considered for inclusion in the Transmission Plan if proposed during the Request Window:

- (a) Economic transmission upgrades or additions proposed under Section 24.1.1;
- (b) Location Constrained Resource Interconnection Facilities under Section 24.1.3 not identified by the CAISO as part of Interconnection Studies performed under the LGIP set forth in Appendix U or the GIP set forth in Appendix Y;
- (c) Demand response programs that are proposed for inclusion in the base case or assumptions for the Transmission Plan or as alternatives to transmission additions or upgrades;
- (d) Generation projects that are proposed as solutions to Congestion identified in previously published Economic Planning Studies, for inclusion in long-term planning studies, or as alternatives to transmission additions or upgrades; and
- (e) Requests for Economic Planning Studies; and
- (f) Reliability-driven projects described in Section 24.1.2.

* * *

25.1 Applicability

This Section 25 and Appendix U (the Standard Large Generator Interconnection Procedures (LGIP)),
Appendix Y (the Generator Interconnection Procedures (GIP)), Appendix S (the Small Generator
Interconnection Procedures (SGIP)), or Appendix W, as applicable, shall apply to:

- (a) each new Generating Unit that seeks to interconnect to the CAISO ControlledGrid:
- (b) each existing Generating Unit connected to the CAISO Controlled Grid that will be modified with a resulting increase in the total capability of the power plant;
- (c) each existing Generating Unit connected to the CAISO Controlled Grid that will be modified without increasing the total capability of the power plant but has changed the electrical characteristics of the power plant such that its reenergization may violate Applicable Reliability Criteria; and
- (d) each existing Qualifying Facility Generating Unit connected to the CAISO Controlled Grid whose total Generation was previously sold to a Participating TO or on-site customer but whose Generation, or any portion thereof, will now be sold in the wholesale market, subject to Section 25.1.2.

25.1.1 Interconnection Request And Generating Unit Requirements

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

* * *

25.1.2 Qualifying Facility Affidavit Requirement

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

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

25.1.2.2 If the CAISO and the applicable Participating TO cannot confirm that the total capability and electrical characteristics are and will be substantially unchanged, then the owner of the Qualifying Facility, or its designee, shall be an Interconnection Customer required to submit an Interconnection Request and comply with Appendix U (the LGIP), Appendix Y (the GIP), Appendix S (the SGIP), or Appendix W, as applicable.

* * *

25.2 Interconnections To The Distribution System

Any proposed interconnection by the owner of a planned Generating Unit, or its designee, to connect that Generating Unit to a Distribution System of a Participating TO will be processed, as applicable, pursuant to the Wholesale Distribution Access Tariff or CPUC Rule 21, or other Local Regulatory Authority requirements, if applicable, of the Participating TO; provided, however, that the owner of the planned Generating Unit, or its designee, shall be required to mitigate any adverse impact on reliability of the CAISO Controlled Grid consistent with Appendix U (the Standard Large Generator Interconnection

Procedures) and Appendix Y (the GIP). In addition, each Participating TO will provide to the CAISO a copy of the system impact study used to determine the impact of a planned Generating Unit on the Distribution System and the CAISO Controlled Grid pursuant to a request to interconnect under the applicable Wholesale Distribution Access Tariff or CPUC Rule 21, or other Local Regulatory Authority requirements, if applicable.

25.3 Maintenance Of Encumbrances

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

* * *

40.4.6 Reductions For Deliverability 40.4.6.1 Deliverability Within the CAISO Balancing Authority Area

In order to determine Net Qualifying Capacity from Resource Adequacy Resources subject to this Section 40.4, the CAISO will determine that a Resource Adequacy Resource is available to serve the aggregate of Load by means of a deliverability study. Documentation explaining the CAISO's deliverability analysis will be posted on the CAISO Website. The deliverability study will be performed annually and shall focus on peak Demand conditions. The results of the deliverability study shall be incorporated into the Net Qualifying Capacity annual report under Section 40.4.2 and will be effective for the next Resource Adequacy Compliance Year. To the extent the deliverability study shows that the Qualifying Capacity is not deliverable to the aggregate of Demand under the conditions studied, the Qualifying Capacity of the Resource Adequacy Resource will be reduced on a MW basis for the capacity that is undeliverable.

methodology posted on the CAISO Website. For Resource Adequacy Resources in the same electrical group which have identified deliverability constraints, the Qualifying Capacity of the Resource Adequacy Resources that obtained Full Capacity Deliverability Status or partial deliverability through Section 8.2 of Appendix Y to this CAISO Tariff will be reduced prior to reducing the Qualifying Capacity of those resources which were originally provided Full Capacity Deliverability Status pursuant to inclusion in an Interconnection Study Cycle under Appendix Y to this CAISO Tariff.

* * *

Appendix A Master Definition Supplement

* * *

Cluster Application Window

The time period for submitting Interconnection Requests as set forth in Section 3.3 of Appendix Y.

* * *

Generator Interconnection Agreement (GIA)

The form of Interconnection Agreement applicable to an Interconnection Request pertaining to a Generating Facility processed under the interconnection procedures set forth in Appendix Y. For a Large Generating Facility, a pro forma version of the Interconnection Agreement is set forth in Appendix Z. For a Small Generating Facility, a pro forma version of the Interconnection Agreement is set forth in Appendix T.

Generator Interconnection Procedures (GIP)

The interconnection procedures applicable to an Interconnection Request pertaining to a Generating Facility processed under Appendix Y.

GIA

Generator Interconnection Agreement

GIP

Generator Interconnection Procedures

* * *

Interconnection Financial Security

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

* * *

Interconnection Study

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

Interconnection Study Cycle

All requirements, actions, and respective obligations of the CAISO, Participating TO, and Interconnection Customer under the GIP set forth in Appendix Y applicable to an Interconnection Request submitted in one of the two annual Cluster Application Windows through execution by the parties or submission to FERC by one or more of the parties of a GIA.

Interconnection Study Deposit

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

* * *

Large Generator Interconnection Agreement (LGIA)

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

Large Generator Interconnection Procedures (LGIP)

The interconnection procedures applicable to an Interconnection Request pertaining to a Generating Facility processed under Appendix U.

Generator Interconnection Study Process Agreement

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

* * *

Off-Peak Deliverability Assessment

The technical study performed under GIP Section 6.3.2.2 set forth in Appendix Y.

* * *

On-Peak Deliverability Assessment

The technical study performed under GIP Section 6.3.2.1 set forth in Appendix Y.

* * *

Phase I Interconnection Study

The engineering study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), that evaluates the impact of the proposed interconnection on the safety and reliability of the CAISO Controlled Grid and, if applicable, an Affected System. The study shall

identify and detail the system impacts that would result if the Generating Facility (ies) were interconnected without identified project modifications or system modifications, as provided in the On-Peak Deliverability Assessment or Off-Peak Deliverability Assessment, and other potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Generator Interconnection Procedures set forth in Appendix Y. The study will also identify the approximate total costs, based on per unit costs, of mitigating these impacts, along with an equitable allocation of those costs to Interconnection Customers for their individual Generating Facilities.

* * *

Pre-Construction Activities

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

* * *

Queue Cluster

A set of Interconnection Requests processed pursuant to Appendix Y other than pursuant to the Fast Track Process or the Independent Study Process set forth in Appendix Y.

* * *

Results Meeting

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

Site Exclusivity Deposit

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

* * *

Appendix T

Small Generator Interconnection Agreement

This Small Generator Interconnection Agreday of, 20, by			is
("Participating TO"), the California Independent public benefit corporation organized and expendent of the corporation organized and expendent organiz	dent System Operator Cor disting under the laws of th	poration, a California no e State of California ("C	CAISO") and
hereinafter sometimes referred to individua	Illy as "Party" or referred to	collectively as the "Pa	rties."
Participating TO Information			
Participating TO:			
Attention:			
Address:	01-1-		
City: Fa	State:	ZIP:	
· · · · · · · · · · · · · · · · · · ·			
CAISO Information			
Attention: Keith Johnson , Manager, Infras 151 Blue Ravine Road Folsom, CA 95630 Phone: 916-351-4400 Fax:	·	s Department	
E-mail: kjohnson@caiso.com			
Interconnection Customer Information			
Interconnection Customer:			
Attention:Address:			
City:	State:	Zip:	
Phone: Fa	ıx:		
E-mail Address:			
Interconnection Customer Application No:			

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

Article 1. Scope And Limitations Of Agreement

- 1.1 This Agreement shall be used for all Small Generating Facility Interconnection Requests submitted under the applicable generator procedure (either the Generator Interconnection Procedures (GIP) set forth in Appendix Y or the Small Generator Interconnection Procedures (SGIP) set forth in Appendix S) except for those submitted under the 10 kW Inverter Process contained in GIP Attachment 5 or SGIP Attachment 5. For those Interconnection Requests, Attachment 5 contains the terms and conditions which serve as the Interconnection Agreement.
- 1.2 This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Participating TO's Transmission System.

- 1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary arrangements (including scheduling) for delivery of electricity in accordance with the CAISO Tariff.
- 1.4 Nothing in this Agreement is intended to affect any other agreement between or among the Parties.

1.5 Responsibilities of the Parties

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

- 1.5.6 The Participating TO and the CAISO shall coordinate with Affected Systems to support the interconnection.
- 1.5.7 [This provision is intentionally omitted.]

1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the CAISO Balancing Authority Area, including, but not limited to; 1) the rules and procedures concerning the operation of generation set forth in the CAISO Tariff for the CAISO Controlled Grid and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement.

1.7 Metering

The Interconnection Customer shall be responsible for the reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment specified in Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

1.8 Reactive Power

- 1.8.1 The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the terminals of each generating unit at a power factor within the range of 0.95 leading to 0.90 lagging, unless the CAISO has established different requirements that apply to all similarly situated generators in the CAISO Balancing Authority Area on a comparable basis. The requirements of this paragraph shall not apply to wind generators and the requirements of Attachment 7 shall apply instead.
- 1.8.2 Payment to the Interconnection Customer for reactive power that the Small Generating Facility provides or absorbs when the CAISO requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1 will be made by the CAISO in accordance with the applicable provisions of the CAISO Tariff.
- 1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement.

Article 2. Inspection, Testing, Authorization, and Right of Access

2.1 Equipment Testing and Inspection

2.1.1 The Interconnection Customer shall test and inspect its Small Generating Facility and Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the Participating TO and the CAISO of such activities no fewer than five (5)Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Participating TO and the CAISO may, at their own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Participating TO and the CAISO a written test report when such testing and inspection is completed.

2.1.2 The Participating TO and the CAISO shall provide the Interconnection Customer written acknowledgment that they have received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Participating TO or the CAISO of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

2.2 Authorization Required Prior to Parallel Operation

- 2.2.1 The Participating TO and the CAISO shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Participating TO and the CAISO shall notify the Interconnection Customer of any changes to these requirements as soon as they are known. The Participating TO and the CAISO shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.
- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the Participating TO's Transmission System without prior written authorization of the Participating TO. The Participating TO will provide such authorization to the Interconnection Customer and the CAISO once the Participating TO receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

2.3 Right of Access to Premises

- 2.3.1 Upon reasonable notice, the Participating TO and the CAISO may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three (3) Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Participating TO and the CAISO at least five (5) Business Days prior to conducting any on-site verification testing of the Small Generating Facility.
- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Participating TO and the CAISO shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.
- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

Article 3. Effective Date, Term, Termination, And Disconnection

3.1 Effective Date

This Agreement shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by the FERC. The Participating TO and the CAISO shall promptly file this Agreement with the FERC upon execution, if required.

3.2 <u>Term of Agreement</u>

This Agreement shall become effective on the Effective Date and shall remain in effect for a period of _____ years from the Effective Date (term specified in individual agreements to be ten (10) years or such other longer period as the Interconnection Customer may request) and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this Agreement (if required), which notice has been accepted for filing by FERC.

- 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Participating TO and the CAISO twenty (20) Business Days written notice.
- 3.3.2 Any Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the CAISO Controlled Grid. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this Agreement or such non-terminating Party otherwise is responsible for these costs under this Agreement.
- 3.3.4 The termination of this Agreement shall not relieve any Party of its liabilities and obligations, owed or continuing at the time of termination.
- 3.3.5 The provisions of this article shall survive termination or expiration of this Agreement.

3.4 Temporary Disconnection

Temporary disconnection of the Small Generating Facility or associated Interconnection Facilities shall continue only for so long as reasonably necessary under Good Utility Practice.

3.4.1 Emergency Conditions

"Emergency Condition" shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; (2) that, in the case of the CAISO, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the CAISO Controlled Grid or the electric systems of others to which the CAISO Controlled Grid is directly connected; (3) that, in the case of the Participating TO, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Participating TO's Transmission System, the Participating TO's Interconnection Facilities, Distribution System, or the electric systems of others to which the Participating TO's electric system is directly connected; or (4) that, in the case of the Interconnection Customer, is imminently likely (as determined in a nondiscriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the CAISO or the Participating TO may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Participating TO or the CAISO shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. The Interconnection Customer shall notify the Participating TO and the CAISO promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the CAISO Controlled Grid, the Participating TO's Interconnection Facilities, or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the

operation of the Interconnection Customer's or Participating TO's facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Routine Maintenance, Construction, and Repair

The Participating TO or the CAISO may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the CAISO Controlled Grid when necessary for routine maintenance, construction, and repairs on the CAISO Controlled Grid or the Participating TO's electric system. The Party scheduling the interruption shall provide the Interconnection Customer with (5) five Business Days notice prior to such interruption. The Party scheduling the interruption shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

The Interconnection Customer shall update its planned maintenance schedules in accordance with the CAISO Tariff. The CAISO may request the Interconnection Customer to reschedule its maintenance as necessary to maintain the reliability of the CAISO Controlled Grid in accordance with the CAISO Tariff. Such planned maintenance schedules and updates and changes to such schedules shall be provided by the Interconnection Customer to the Participating TO concurrently with their submittal to the CAISO.

3.4.3 Forced Outages

During any forced outage, the Participating TO or the CAISO may suspend interconnection service to effect immediate repairs on the CAISO Controlled Grid or the Participating TO's electric system. The Participating TO or the CAISO shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Participating TO or the CAISO shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection. The Interconnection Customer shall notify CAISO, as soon as practicable, of all forced outages or reductions of the Small Generating Facility in accordance with the CAISO Tariff.

3.4.4 Adverse Operating Effects

The Participating TO or the CAISO shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the CAISO Controlled Grid, the Participating TO's Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Participating TO or the CAISO may disconnect the Small Generating Facility. The Participating TO or the CAISO shall provide the Interconnection Customer with (5) five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from the Participating TO and the CAISO before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the CAISO Controlled Grid or the Participating TO's electric system. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the Participating TO's and the CAISO's prior written authorization, the Participating TO or the CAISO shall have the right to temporarily disconnect the Small Generating Facility.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, the Participating TO's electric system, and the CAISO Controlled Grid to their normal operating state as soon as reasonably practicable following a temporary disconnection.

Article 4. Costs for Interconnection Facilities & Distribution Upgrades

4.1 Interconnection Facilities

- 4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Participating TO shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, the CAISO, and the Participating TO.
- 4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Participating TO's Interconnection Facilities.

4.2 <u>Distribution Upgrades</u>

The Participating TO shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Participating TO and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

Article 5. Cost Responsibility For Network Upgrades

5.1 Applicability

No portion of this Article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades.

5.2 Network Upgrades

The Participating TO shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Participating TO and the Interconnection Customer agree, the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Participating TO elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

5.3 Transmission Credits

No later than thirty (30) days prior to the Commercial Operation Date, the Interconnection Customer may make a one-time election by written notice to the CAISO and the Participating TO to receive Congestion Revenue Rights as defined in and as available under the CAISO Tariff at the time of the election in accordance with the CAISO Tariff, in lieu of a refund of the cost of Network Upgrades in accordance with Article 5.3.1.

5.3.1 Repayment of Amounts Advanced for Network Upgrades

Upon the Commercial Operation Date, the Interconnection Customer shall be entitled to a repayment, equal to the total amount paid to the Participating TO for the cost of Network Upgrades. Such amount shall include any tax gross-up or other tax-related payments associated with Network Upgrades not refunded to the Interconnection Customer, and shall be paid to the Interconnection Customer by the Participating TO on a dollar-fordollar basis either through (1) direct payments made on a levelized basis over the fiveyear period commencing on the Commercial Operation Date; or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years from the Commercial Operation Date. Notwithstanding the foregoing, if this Agreement terminates within five (5) years from the Commercial Operation Date, the Participating TO's obligation to pay refunds to the Interconnection Customer shall cease as of the date of termination. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment. Interest shall continue to accrue on the repayment obligation so long as this Agreement is in effect. The Interconnection Customer may assign such repayment rights to any person.

If the Small Generating Facility fails to achieve commercial operation, but it or another Generating Facility is later constructed and makes use of the Network Upgrades, the Participating TO shall at that time reimburse Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the Generating Facility, if different, is responsible for identifying the entity to which reimbursement must be made.

5.3.2 Special Provisions for Affected Systems

The Interconnection Customer shall enter into an agreement with the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid, as applicable, in accordance with the applicable generation interconnection procedure under which the Small Generating Facility was processed (SGIP or GIP). Such agreement shall specify the terms governing payments to be made by the Interconnection Customer to the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid. In no event shall the Participating TO be responsible for the repayment for any facilities that are not part of the Participating TO's Transmission System.

5.3.3 Rights Under Other Agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Small Generating Facility.

Article 6. Billing, Payment, Milestones, And Financial Security

6.1 <u>Billing and Payment Procedures and Final Accounting</u>

6.1.1 The Participating TO shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the

Parties. The Interconnection Customer shall pay each bill within thirty (30) calendar days of receipt, or as otherwise agreed to by the Parties. Notwithstanding the foregoing, any invoices between the CAISO and another Party shall be submitted and paid in accordance with the CAISO Tariff.

6.1.2 Within six (6) months of completing the construction and installation of the Participating TO's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Participating TO shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Participating TO for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Participating TO shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Participating TO within thirty (30) calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility under this Agreement, the Participating TO shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, as defined in article 7.5.1, it shall immediately notify the other Parties of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) request appropriate amendments to Attachment 4. The Parties affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless (1) they will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) they have reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

6.3 <u>Financial Security Arrangements for Small Generating Facilities Processed Under the Fast Track Process or Small Generating Facilities Processed under SGIP</u>

The terms and conditions of this Article 6.3 shall apply only to:

- 1. Small Generating Facilities that are no larger than 5 MW that are processed under the Fast Track Process under the Generation Interconnection Procedures, CAISO Tariff Appendix Y; and
- Small Generating Facilities processed under the Small Generation Interconnection Procedures set forth in CAISO Tariff Appendix S.
 In such case, the terms of Article 6.4 below do not apply to this Agreement.

For easy reference, the Parties shall check the Box below when this Article 6.3 applies:

[1 THIS ARTICLE 6.3 APPLIES

6.3.1 At least twenty (20) Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Participating TO's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Participating TO, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Participating TO and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the

- applicable portion of the Participating TO's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Participating TO under this Agreement during its term.
- 6.3.2 If a guarantee is provided, the guarantee must be made by an entity that meets the creditworthiness requirements of the Participating TO, and contain terms and conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.
- 6.3.3 If a letter of credit or surety bond is provided, the letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Participating TO and must specify a reasonable expiration date.
- 6.4 Financial Security Arrangements for All Other Small Generating Facilities

The terms of this Article 6.4 apply to Small Generating Facilities that have been processed under either

- 1. the Cluster Study Process or
- 2. the Independent Study Track Process

of the Generation Interconnection Procedures set forth in CAISO Tariff Appendix Y. In such case, the provisions of Article 6.3 do not apply to this Agreement.

In such case, the terms of Article 6.3 above do not apply to this Agreement.

For easy reference, the Parties shall check the Box below when this Article 6.4 applies:

[] THIS ARTICLE 6.4 APPLIES

- 6.4.1 The Interconnection Customer is obligated to provide all necessary Interconnection Financial Security required under Section 9 of the GIP in a manner acceptable under Section 9 of the GIP. Failure by the Interconnection Customer to timely satisfy the GIP's requirements for the provision of Interconnection Financial Security shall be deemed a breach of this Agreement and a condition of Default of this Agreement.
- 6.4.2 Notwithstanding any other provision in this Agreement for notice of Default and opportunity to cure such Default, the CAISO or the Participating TO shall provide Interconnection Customer with written notice of any Default due to timely failure to post Financial Security, and the Interconnection Customer shall have five (5) Business Days from the date of such notice to cure such Default by posting the required Financial Security. If the Interconnection Customer fails to cure the Default, then this Agreement shall be deemed terminated.

Article 7. Assignment, Liability, Indemnity, Force Majeure, And Default

7.1 Assignment

This Agreement may be assigned by any Party upon fifteen (15) Business Days prior written notice and opportunity to object by the other Parties; provided that:

- 7.1.1 Any 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, provided that the Interconnection Customer promptly notifies the Participating TO and the CAISO of any such assignment;
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Participating TO or the CAISO, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection

Customer will promptly notify the Participating TO and the CAISO of any such assignment.

7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

7.2 Limitation of Liability

Each Party's liability to the other Parties for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall any Party be liable to the other Parties for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

7.3 <u>Indemnity</u>

- 7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in Article 7.2.
- 7.3.2 The Parties shall at all times indemnify, defend, and hold the other Parties harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from another Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.
- 7.3.3 If an indemnified Party is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified Party may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.
- 7.3.4 If an indemnifying Party is obligated to indemnify and hold any indemnified Party harmless under this article, the amount owing to the indemnified Party shall be the amount of such indemnified Party's actual loss, net of any insurance or other recovery.
- 7.3.5 Promptly after receipt by an indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified Party shall notify the indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party.

7.4 Consequential Damages

Other than as expressly provided for in this Agreement, no Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to

another Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

7.5 Force Majeure

- 7.5.1 As used in this article, a Force Majeure Event 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 an act of negligence or intentional wrongdoing by the Party claiming Force Majeure."
- 7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Parties, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Parties informed on a continuing basis of developments relating to the Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

7.6 Default

- 7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of another Party. Upon a Default, the affected non-defaulting Party(ies) shall give written notice of such Default to the defaulting Party. Except as provided in Article 7.6.2 and in Article 6.4.2, the defaulting Party shall have sixty (60) calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.
- 7.6.2 If a Default is not cured as provided in this article, or if a Default is not capable of being cured within the period provided for herein, the affected non-defaulting Party(ies) shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not such Party(ies) terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

Article 8. Insurance

8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be

obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Participating TO or CAISO, except that the Interconnection Customer shall show proof of insurance to the Participating TO and CAISO no later than ten Business Days prior to the anticipated Commercial Operation Date. If the Interconnection Customer is of sufficient credit-worthiness, it may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.

- 8.2 The Participating TO agrees to maintain general liability insurance or self-insurance consistent with the Participating TO's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Participating TO's liabilities undertaken pursuant to this Agreement.
- 8.3 The CAISO agrees to maintain general liability insurance or self-insurance consistent with the CAISO's commercial practice. Such insurance shall not exclude coverage for the CAISO's liabilities undertaken pursuant to this Agreement.
- The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

Article 9. Confidentiality

- 9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to another Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.
- 9.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Parties and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.
 - 9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Parties as it employs to protect its own Confidential Information.
 - 9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.
- 9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Parties to this Agreement when it is notified by FERC 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 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

Article 10. Disputes

All disputes arising out of or in connection with this Agreement whereby relief is sought by or from CAISO shall be settled in accordance with the provisions of Article 13 of the CAISO Tariff, except that references to the CAISO Tariff in such Article 13 of the CAISO Tariff shall be read as reference to this Agreement. Disputes arising out of or in connection with this Agreement not subject to provisions of Article 13 of the CAISO Tariff shall be resolved as follows:

- 10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.
- 10.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.
- 10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.
- The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at http://www.ferc.gov/legal/adr.asp.
- 10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.
- 10.6 If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

Article 11. Taxes

- 11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.
- 11.2 Each Party shall cooperate with the other Parties to maintain the other Parties' tax status.

 Nothing in this Agreement is intended to adversely affect the Participating TO's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

Article 12. Miscellaneous

12.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of ______ (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all

Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

12.2 <u>Amendment</u>

The Parties may amend this Agreement by a written instrument duly executed by all of the Parties, or under article 12.12 of this Agreement.

12.3 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.

12.4 Waiver

- 12.4.1 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.
- 12.4.2 Any waiver at any time by any 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 Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO. Any waiver of this Agreement shall, if requested, be provided in writing.

12.5 Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between or among the Parties with respect to the subject matter of this 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.

12.6 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.

12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership among the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.

12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

12.9 <u>Security Arrangements</u>

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all

transmission providers, market participants, and interconnection customers interconnected to electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

12.10 Environmental Releases

Each Party shall notify the other Parties, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Parties. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Parties copies of any publicly available reports filed with any governmental authorities addressing such events.

12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Parties for the performance of such subcontractor.

- 12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Participating TO or the CAISO be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.
- 12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

12.12 Reservation of Rights

The CAISO and Participating TO shall each have the right to make a unilateral filing with FERC to modify this Agreement pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following articles of this Agreement and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these articles:

Introductory Paragraph, 1.1, 1.2, 1.3, 1.4, 1.5.1, 1.5.2, 1.5.3, 1.5.4, 1.5.5, 1.5.6, 1.5.7, 1.6, 1.7, 1.8.1, 1.9, 2.1, 2.2.1, 2.3, 3, 4.1.1 (last sentence only), 5.1, 5.3, 6.2, 7, 8, 9, 11, 12, 13, Attachment 1, Attachment 4, Attachment 5, and Attachment 7.

The Participating TO shall have the exclusive right to make a unilateral filing with FERC to modify this Agreement pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following articles of this Agreement and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these articles:

2.2.2, 4.1.1 (all but the last sentence), 4.1.2, 4.2, 5.2, 6.1.1 (all but the last sentence), 6.1.2, 6.3, 10 (all but preamble), Attachment 2, Attachment 3 and Attachment 6.

The CAISO shall have the exclusive right to make a unilateral filing with FERC to modify this Agreement pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following articles of this Agreement and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these articles:

1.8.2, 6.1.1 (last sentence only) and 10 (preamble only).

The Interconnection Customer, the CAISO, and the Participating TO shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; 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, except to the extent that the Parties otherwise mutually agree as provided herein.

Article 13. Notices

13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national courier service, or sent by first class mail, postage prepaid, to the person specified below:

	If to the Interconnection Customer:		
	Attention:		
	Address:		
	City:	State: _ Fax:	Zip:
	Phone:	_ Fax:	_
	If to the Participating TO:		
	Participating TO:		
	Attention:		
	Address:		
	City:	State:	Zip:
	Phone:	_ Fax:	_
	If to the CAISO:		
	California Independent Sys	stem Operator	
	Attention:	<u> </u>	
	151 Blue Ravine Road		
	Folsom, CA 95630		
	Phone: 916-351-4400	Fax:	
13.2	Billing and Payment		
	Billings and payments shall be sen	t to the addresses set out below	r:
	Interconnection Customer:		
	Attention:		
	Address:		
	Citv:	State:	Zip:

	Address: City:		State:	7in:
	Oity		State	Διρ
Any requ	native Forms of Notice notice or request required or pe ired by this Agreement to be gi to the telephone numbers and	ven in writing	may be so given b	y telephone, facsimile or
If to	the Interconnection Customer:			
	Interconnection Customer: Attention:			
	Address:			
	City:		State:	Zip:
	Phone: E-mail address:			
If to	the Participating TO:			
	Participating TO:			
	Address:			
	City:		State:	Zip:
	Phone: E-mail address:	_ Fax:		
If to	the CAISO:			
	California Independent Sys	tem Operator		
	Attention:			
	151 Blue Ravine Road			
	Folsom, CA 95630			
	Phone: 916-351-4400			
	E-mail address:			
	gnated Operating Representati			
	Parties may also designate ope be necessary or convenient fo			
	e as the point of contact with re			
Inter	connection Customer's Operat	ing Represent	ative:	
	Interconnection Customer: Attention:			
	Address:			
	City:		State:	Zip:
	City:Phone:	_ Fax:		
Parti	cipating TO's Operating Repre	sentative:		
	Participating TO: Attention:			
	AUGUIOU.			

	City:	;	State:	Zip:
	City: Phone:	Fax:		,
	CAISO's Operating Representative			
	California Independent System Attention: 151 Blue Ravine Road Folsom, CA 95630	Operator -		
	Phone: 916-351-4400	Fax:		
13.5	Changes to the Notice Information Any Party may change this information Parties prior to the effective date of the	by giving five		vritten notice to the other
Article	14. Signatures			
	NESS WHEREOF, the Parties have cau thorized representatives.	sed this Agree	ement to be exec	cuted by their respective
For the	California Independent System Operato	<u>or</u>		
Name:				
Title: _				
Date: _				
For the	Participating TO			
Name:				
Title: _				
Date: _				
For the	Interconnection Customer			
Name:				
Title: _				
Date: _				

Glossary of Terms

Affected System – An electric system other than the CAISO Controlled Grid that may be affected by the proposed interconnection, including the Participating TO's electric system that is not part of the CAISO Controlled Grid.

Applicable Laws and Regulations – All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

Balancing Authority Area - The collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.

Business Day – Monday through Friday, excluding federal holidays and the day after Thanksgiving Day.

Commercial Operation Date – The date on which a Small Generating Facility commenced generating electricity for sale as agreed upon by the Participating TO and the Interconnection Customer and in accordance with any implementation plan agreed to by the Participating TO and the CAISO for multiple individual generating units or project phases at a Small Generating Facility where an Interconnection Customer intends to establish separate Commercial Operation Dates for those generating units or project phases.

Default – The failure of a breaching Party to cure its breach under this Agreement.

Distribution System – Those non-CAISO-controlled transmission and distribution facilities owned by the Participating TO.

Distribution Upgrades – The additions, modifications, and upgrades to the Participating TO's Distribution System. Distribution Upgrades do not include Interconnection Facilities.

Good Utility Practice – Any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be any one of a number of the optimum practices, methods, or acts to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

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

Interconnection Facilities – The Participating TO's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Participating TO's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

Interconnection Handbook – A handbook, developed by the Participating TO and posted on the Participating TO's website or otherwise made available by the Participating TO, describing technical and operational requirements for wholesale generators and loads connected to the Participating TO's Transmission System, as such handbook may be modified or superseded from time to time. The Participating TO's standards contained in the Interconnection Handbook shall be deemed consistent with Good Utility Practice and applicable reliability standards.

Interconnection Request – A request, in accordance with the CAISO Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the CAISO Controlled Grid.

CAISO Controlled Grid – The system of transmission lines and associated facilities of the parties to a Transmission Control Agreement that have been placed under the CAISO's Operational Control.

CAISO Tariff – The CAISO's tariff, as filed with FERC, and as amended or supplemented from time to time, or any successor tariff.

Material Modification – A modification that has a material impact on the cost or timing of any Interconnection Request or any other valid interconnection request with a later queue priority date.

Network Upgrades – Additions, modifications, and upgrades to the Participating TO's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the CAISO Controlled Grid to accommodate the interconnection of the Small Generating Facility with the CAISO Controlled Grid. Network Upgrades do not include Distribution Upgrades.

Operational Control – The rights of the CAISO under a Transmission Control Agreement and the CAISO Tariff to direct the parties to the Transmission Control Agreement how to operate their transmission lines and facilities and other electric plant affecting the reliability of those lines and facilities for the purpose of affording comparable non-discriminatory transmission access and meeting applicable reliability criteria.

Operating Requirements – Any operating and technical requirements that may be applicable due to the CAISO, Western Electricity Coordinating Council, Balancing Authority Area, or the Participating TO's requirements, including those set forth in this Agreement.

Party or Parties – The Participating TO, CAISO, Interconnection Customer or the applicable combination of the above.

Point of Interconnection – The point where the Interconnection Facilities connect with the Participating TO's Transmission System.

Reasonable Efforts – With respect to an action required to be attempted or taken by a Party under this Agreement, 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.

Small Generating Facility – The Interconnection Customer's device for the production of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

Transmission Control Agreement - CAISO FERC Electric Tariff No. 7.

Transmission System – The facilities owned and operated by the Participating TO and that have been placed under the CAISO's Operational Control, which facilities form part of the CAISO Controlled Grid.

Upgrades – The required additions and modifications to the Participating TO's Transmission System and Distribution System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

Description and Costs of the Small Generating Facility, Interconnection Facilities, and Metering Equipment

Equipment, including the Small Generating Facility, Interconnection Facilities, and metering equipment shall be itemized and identified as being owned by the Interconnection Customer or the Participating TO. The Participating TO will provide a best estimate itemized cost, including overheads, of its Interconnection Facilities and metering equipment, and a best estimate itemized cost of the annual operation and maintenance expenses associated with its Interconnection Facilities and metering equipment.

One-line Diagram Depicting the Small Generating Facility, Interconnection Facilities, Metering Equipment, and Upgrades

Milestones

In-Service Date:	
Critical milestones and responsibility as agree	d to by the Parties:
Milestone/Date	Responsible Party
(1)	
(2)	
(3)	
(4)	
(5)	
(6)	
(7)	
(8)	
(9)	
(10)	
Agreed to by:	
For the CAISO	Date
For the Participating TO	Date
For the Interconnection Customer	Date

Additional Operating Requirements for the CAISO Controlled Grid and Affected Systems Needed to Support the Interconnection Customer's Needs

The Participating TO and the CAISO shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the CAISO Controlled Grid.

Participating TO's Description of its Upgrades and Best Estimate of Upgrade Costs

The Participating TO shall describe Upgrades and provide an itemized best estimate of the cost, including overheads, of the Upgrades and annual operation and maintenance expenses associated with such Upgrades. The Participating TO shall functionalize Upgrade costs and annual expenses as either transmission or distribution related.

INTERCONNECTION REQUIREMENTS FOR A WIND GENERATING PLANT

Attachment 7 sets forth requirements and provisions specific to a wind generating plant. All other requirements of this Agreement continue to apply to wind generating plant interconnections.

A. Technical Standards Applicable to a Wind Generating Plant

i. Low Voltage Ride-Through (LVRT) Capability

A wind generating plant shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below. The LVRT standard provides for a transition period standard and a post-transition period standard.

Transition Period LVRT Standard

The transition period standard applies to wind generating plants that have either: (i) interconnection agreements signed and filed with FERC, filed with FERC in unexecuted form, or filed with FERC as non-conforming agreements between January 1, 2006 and December 31, 2006, with a scheduled in-service date no later than December 31, 2007, or (ii) wind generating turbines subject to a wind turbine procurement contract executed prior to December 31, 2005, for delivery through 2007.

- 1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the Participating TO. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles at a voltage as low as 0.15 p.u., as measured at the high side of the wind generating plant step-up transformer (i.e. the transformer that steps the voltage up to the transmission interconnection voltage or "GSU"), after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the transmission system.
- 2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU or to faults that would result in a voltage lower than 0.15 per unit on the high side of the GSU serving the facility.
- 3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
- 4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAr Compensator, etc.) within the wind generating plant or by a combination of generator performance and additional equipment.
- 5. Existing individual generator units that are, or have been, interconnected to the network at the same location at the effective date of the Attachment 7 LVRT Standard are exempt from meeting the Attachment 7 LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Attachment 7 LVRT Standard.

Post-transition Period LVRT Standard

All wind generating plants not covered by the transition period described above must meet the following requirements:

1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 – 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by

and documented by the Participating TO. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the CAISO Controlled Grid. A wind generating plant shall remain interconnected during such a fault on the CAISO Controlled Grid for a voltage level as low as zero volts, as measured at the high voltage side of the wind GSU.

- 2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.
- 3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
- 4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAr Compensator) within the wind generating plant or by a combination of generator performance and additional equipment.
- 5. Existing individual generator units that are, or have been, interconnected to the CAISO Controlled Grid at the same location at the effective date of the Attachment 7 LVRT Standard are exempt from meeting the Attachment 7 LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Attachment 7 LVRT Standard.

ii. Power Factor Design Criteria (Reactive Power)

A wind generating plant shall operate within a power factor within the range of 0.95 leading to 0.95 lagging, measured at the Point of Interconnection as defined in this Agreement in order to maintain a specified voltage schedule, if the system impact study shows that such a requirement is necessary to ensure safety or reliability. The power factor range standard can be met by using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two, if agreed to by the Participating TO and CAISO. The Interconnection Customer shall not disable power factor equipment while the wind plant is in operation. Wind plants shall also be able to provide sufficient dynamic voltage support in lieu of the power system stabilizer and automatic voltage regulation at the generator excitation system if the system impact study shows this to be required for system safety or reliability.

iii. Supervisory Control and Data Acquisition (SCADA) Capability

The wind plant shall provide SCADA capability to transmit data and receive instructions from the Participating TO and CAISO to protect system reliability. The Participating TO and CAISO and the wind plant Interconnection Customer shall determine what SCADA information is essential for the proposed wind plant, taking into account the size of the plant and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

[This Attachment is Intentionally Omitted]

* * *

Appendix Y GIP For Interconnection Requests

Generator Interconnection Procedures (GIP)

Generator Interconnection Procedures (GIP)

Table of Contents

1	OB	JECTI'	VFS	DEFIN	ITIONS

- 1.1 Objectives and Applicability
- 1.2 Definitions
 - 1.2.1 Master Definitions Supplement
 - 1.2.2 Special Definitions for this GIP

2 SCOPE AND APPLICATION

- 2.1 Application of Generator Interconnection Procedures
- 2.2 Comparability
- 2.3 Interconnection Base Case Data
- 2.4 Interconnection Service and Studies
 - 2.4.1 No Applicability to Transmission Service
 - 2.4.2 The Product
 - 2.4.3 The Interconnection Studies

3 INTERCONNECTION REQUESTS

- 3.1 General
- 3.2 Roles and Responsibilities
- 3.3 Timing for Submitting Interconnection Requests
 - 3.3.1 Timing for Submitting Interconnection Requests in Queue Cluster
 - 3.3.2 Timing for Submitting Interconnection Requests for Independent Study Process and Fast Track Process
- **3.4 [NOT USED]**
- 3.5 Processing of Interconnection Requests
 - 3.5.1 Initiating an Interconnection Request
 - 3.5.2 Validation of Interconnection Request
- 3.6 Internet Posting
- 3.7 Coordination with Affected Systems
- 3.8 Withdrawal
- 3.9 Transferability of Interconnection Request
- **4 INTERCONNECTION STUDY PROCESS**
- 4.1 Criteria for Independent Study Process Eligibility
- 4.2 Determination of Electrical Independence
 - 4.2.1 Flow Impact Test
 - 4.2.2 Short Circuit Test

- 4.3 Scoping Meeting
- 4.4 System Impact Study
- 4.5 Facilities Study
- 4.6 Deliverability Assessment
- 4.7 Extension of Commercial Operation Date
- **5 FAST TRACK PROCESS**
- 5.1 Applicability and Initiation of Fast Track Process Request
- 5.2 Initial Review
- 5.3 Screens
- **5.4 Customer Options Meeting**
- 5.5 Supplemental Review
- **6 GENERATOR INTERCONENCTION STUDY PROCESS AGREEMENT**
- 6.1 Generator Interconnection Study Process Agreement
- 6.2 Scoping Meeting
- **6.3 Grouping Interconnection Requests**
- 6.4 Scope and Purpose of Phase I Interconnection Study
- 6.5 Identification and Cost for Network Upgrades
 - 6.5.1 Reliability Network Upgrades
 - 6.5.2 Delivery Network Upgrades
 - 6.5.2.1 The On-Peak Deliverability Assessment
 - 6.5.2.2 Off-Peak Deliverability Assessment
- 6.6 Use of Per Unit Costs to Estimate Network Upgrade Costs
- 6.7 I Phase I Study Costs Form Basis of Financial Security
- 6.8 Phase I Interconnection Study Procedures
- 6.9 Phase I Interconnection Study Results Meeting
 - 6.9.1 Commercial Operation Date
 - 6.9.2 Modifications

7 PHASE II INTERCONNECTION STUDY FOR QUEUE CLUSTERS

- 7.1 Scope of Phase II Interconnection Study
- 7.2 Coordination of the Phase II Interconnection Study with the Transmission Planning Process
- 7.3 Financing of Reliability Network Upgrades
- 7.4 Financing of Delivery Network Upgrades
- 7.5 Phase II Interconnection Study Procedures
- 7.6 Accelerated Phase II Interconnection Study Process
- 7.7 Meeting with the CAISO and Applicable Participating TO(s)
- **8 ADDITIONAL DELIVERABILITY ASSESSMENT OPTIONS**
- 8.1 One-Time Full Capacity Deliverability Option
- 8.2 Annual Full Capacity Deliverability Option

9 INTERCONNECTION FINANCIAL SECURITY

- 9.1 Types of Interconnection Financial Security
- 9.2 Initial Posting of Interconnection Financial Security
- 9.3 Second and Third Posting of Interconnection Financial Security
 - 9.3.1 Second Posting of Interconnection Financial Security.
 - 9.3.2 Third Posting of Interconnection Financial Security.

9.4 General Effect of Withdrawal of Interconnection Request or Termination of the GIA on Interconnection Financial Security

- 9.4.1 Conditions for Partial Recovery of Interconnection Financial Security
 Upon Withdrawal of Interconnection Request or Termination of GIA
- 9.4.2 Schedule for Determining Non-Refundable Portion of the Interconnection Financial Security for Network Upgrades

10 ENGINEERING & PROCUREMENT ("E&P") AGREEMENT

- 11 GENERATOR INTERCONNECTION AGREEMENT (GIA)
- 11.1 Tender
- 11.2 Negotiation
- 11.3 Execution and Filing
- 11.4 Commencement of Interconnection Activities
- 11.5 Interconnection Customer to Meet Requirements of the Participating TO's Interconnection Handbook

12 PTO's INTERCONNECTION FACILITIES AND NETWORK UPGRADES

- 12.1 Schedule
- 12.2 Construction Sequencing
 - 12.2.1 General
 - 12.2.2 Construction of Network Upgrades that are or were an Obligation of an Entity other than the Interconnection Customer
 - 12.2.3 Advancing Construction of Network Upgrades that are Part of the CAISO's Transmission Plan

12.3 Network Upgrades

- 12.3.1 Initial Funding
- 12.3.2 Repayment of Amounts Advanced for Network Upgrades and Refund of Interconnection Financial Security

12.4 Special Provisions for Affected Systems and Other Affected Participating TOs

13 MISCELLANEOUS

13.1 Confidentiality

- 13.1.1 Scope
- 13.1.2 Release of Confidential Information
- 13.1.3 Rights
- 13.1.4 No Warranties

13 1 5 Standard of (Care
----------------------	------

- 13.1.6 Order of Disclosure
- 13.1.7 Remedies
- 13.1.8 Disclosure to FERC, its Staff, or a State
- 13.1.9 [No Subheading Title]
- 13.1.10 [No Subheading Title]
- 13.1.11 [No Subheading Title]

13.2 Delegation of Responsibility

- 13.3 [NOT USED]
- 13.4 [NOT USED]
- 13.5 Disputes
 - 13.5.1 Submission
 - 13.5.2 External Arbitration Procedures
 - 13.5.3 Arbitration Decisions
 - 13.5.4 Costs

13.6 Local Furnishing Bonds

- 13.6.1 Participating TOs That Own Facilities Financed by Local Furnishing Bonds
- 13.6.2 Alternative Procedures for Requesting Interconnection Service

13.7 Change in CAISO Operational Control

Appendix 1 Interconnection Request

Attachment A Generating Facility Data

Appendix 2 Generator Interconnection Procedures (GIP) Relating to the Transition Cluster

Appendix 3 Generator Interconnection Study Process Agreement for Queue Clusters

Appendix A Assumptions in Phase I Interconnection Study

Appendix B Data Form, Pre-Phase II Interconnection Study

Appendix 4 Agreement for Allocating GIP and Study Responsibilities

Attachment A Interconnection Study Responsibility Allocation

Attachment B Contacts for Notices

Appendix 5 Schedule for Release and Review of Per Unit Costs

Appendix 6 Generator Interconnection Study Process Agreement for Independent Study Process

Appendix A Assumptions in System Impact Study

Appendix B Data Form, Pre-Facilities Study

Appendix 7 Application, Procedures & Terms for 10 kW Interverter Process

Appendix 8 Transition of Existing SGIP Interconnection Requests to the GIP

Appendix 9 Certification Codes and Standards

Appendix 10 Certification of Small Generator Equipment Packages

Section 1 Objectives And Definitions

1.1 Objectives And Applicability

The objective of this GIP is to implement the requirements for both Small and Large Generating Facility interconnections to the CAISO Controlled Grid. This GIP applies to Interconnection Requests that are either: (i) assigned to a Queue Cluster, (ii) included in the Independent Study Process, or (iii) included in the Fast Track Process, 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 GIP. References to GIP are to this Appendix Y.

1.2.2 Special Definitions for this GIP.

In this GIP, 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 GIP.

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

"Fast Track Process" shall mean the procedure for evaluating an Interconnection Request for a certified Small Generating Facility no larger than 5 MW that includes the GIP Section 5.3 screens, customer options meeting, and optional supplemental review.

"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.

"Independent Study Process" or "ISP" shall mean the procedure for evaluating an Interconnection Request for a Generating Facility independently of the process applicable to a Generating Facility assigned to a Queue Cluster or the Fast Track Process.

"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 Generator Interconnection Procedures, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

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

Section 2 Scope And Application

2.1 Application Of Generator Interconnection Procedures

Sections 2 through 13 of this GIP apply to processing an Interconnection Request pertaining to a Generating Facility that is either: (i) assigned to a Queue Cluster, (ii) included in the Independent Study Process, or (iii) included in the Fast Track Process, pursuant to the terms of this CAISO Tariff for the performance of its Interconnection Studies. Appendix 2 of this GIP sets forth exceptions to the provisions of this GIP that apply to processing an Interconnection Request pertaining to a Generating Facility that meets the criteria set forth in GIP Appendix 2.

2.2 Comparability

The CAISO shall receive, process, and analyze Interconnection Requests in a timely manner as set forth in this GIP. The CAISO will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers as set forth in this GIP, 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 Cluster Application Windows for the Interconnection Study Cycle, as well as all Generation reflected in the Interconnection Requests in the Independent Study Process that entered the CAISO's interconnection queue prior to the creation of the Base Case, along with any associated transmission upgrades or additions; (2) after the Phase I Interconnection Study with the Generation reflected in valid Interconnection Requests submitted in the Cluster Application Window for the Interconnection Study Cycle, and the identified preliminary transmission upgrades or additions, as well as all Generation reflected in the Interconnection Requests in the Independent Study Process that entered the CAISO's interconnection queue prior to the creation of the Base Case, along with any associated transmission upgrades or additions; (3) prior to the Phase II Interconnection Study, including all remaining Generation from the Phase I Interconnection Study for the Interconnection Study Cycle, as well as all Generation reflected in the Interconnection Requests in the Independent Study Process that entered the CAISO's interconnection queue prior to the creation of the Base Case. along with any associated transmission upgrades or additions; and (4) after the Phase II Interconnection Study, including all remaining Generation from the applicable Phase I Interconnection Study and the identified transmission upgrades and additions for the Interconnection Study Cycle, as well as all Generation reflected in the Interconnection Requests in the Independent Study Process that entered the CAISO's interconnection queue prior to the creation of the Base Case, along with any associated transmission upgrades or additions.

Interconnection Base Case Data shall include information subject to the confidentiality provisions in GIP 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 as all requirements under 18 C.F.R. Section 388.113 for obtaining the release of Critical Energy Infrastructure Information (as that term is defined by FERC).

2.4 Interconnection Service And Studies

2.4.1 No Applicability to Transmission Service.

Nothing in this GIP 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 Generating Facility to the CAISO Controlled Grid and be eligible to deliver the 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.

For Interconnection Requests in a Queue Cluster, the Interconnection Studies consist of a Phase I Interconnection Study and a Phase II Interconnection Study. For Interconnection Requests processed under the Independent Study Process, the Interconnection Studies consist of a System Impact Study and a Facilities Study. The Interconnection Studies 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 Phase I and Phase II Interconnection Studies for Queue Cluster Generating Facilities will also identify Delivery Network Upgrades for all Generating Facilities, including those being processed under the Independent Study Process, to allow the full output of a Generating Facility selecting Full Capacity Deliverability Status, and, as applicable, the maximum allowed output of the interconnecting 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 GIP Section 6.5.2.

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 GIP. The CAISO will forward a copy of the Interconnection Request to the applicable Participating TO within five (5) Business Days of receipt.

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

3.2 Roles And Responsibilities

- (a) Each Interconnection Request will be subject to the direction and oversight of the CAISO. The CAISO will conduct or cause to be performed the required Interconnection Studies and any additional studies the CAISO determines to be reasonably necessary, and will direct the applicable Participating TO to perform portions of studies where the Participating TO has specific and non-transferable expertise or data and can conduct the studies more efficiently and cost effectively than the CAISO. The CAISO will coordinate with Affected System Operators in accordance with GIP Section 3.7.
- (b) The CAISO will complete or cause to be completed all studies as required within the timelines provided in this GIP. 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 GIP.
- (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 Timing for Submitting Interconnection Requests

3.3.1 Timing for Submitting Interconnection Requests in Queue Cluster

Except for Interconnection Customers requesting processing under the Independent Study Process or Fast Track Process, Interconnection Requests must be submitted during a Cluster Application Window. There will be two Cluster Application Windows associated with each Interconnection Study Cycle. The first Cluster Application Window will open on October 15 and close on November 15 of the year prior to the year in which the Interconnection Studies are performed. The second Cluster Application Window will open on March 1 and close on March 31 of the year in which the Interconnection Studies are performed. In the event that any date set forth in this section is not a Business Day, then the applicable date shall be the next Business Day thereafter.

For the CAISO's fourth Queue Cluster, there will only be one Cluster Application Window, which will open on March 1, 2011 and close on March 31, 2011.

3.3.2 Timing for Submitting Interconnection Requests for Independent Study Process and Fast Track Process

Interconnection Customers may submit Interconnection Requests for processing under the Independent Study Process or the Fast Track Process at any time during the year.

3.4 [Not Used]

3.5 Processing of Interconnection Requests

3.5.1 Initiating an Interconnection Request.

To initiate an Interconnection Request, except as set forth in GIP Section 5, the Interconnection Customer must submit all of the following during a Cluster Application Window, or at any time during the year for proposed Generating Facilities applying for processing under the Independent Study Process:

- (i) An Interconnection Study Deposit equal to \$50,000 plus \$1,000 per MW of electrical output of the Generating Facility, up to a maximum of \$250,000. With respect to Interconnection Customers that have submitted Interconnection Requests: (1) if such customers, for whom the Phase I Interconnection Studies have not yet commenced, have posted an Interconnection Study Deposit that is less than the amount required by this section, such Interconnection Customers must post the difference between the amount posted and the amount required by this section within thirty (30) calendar days of a FERC order accepting this provision; (2) if such customers, for whom the Phase I Interconnection Studies have not yet commenced, have posted an Interconnection Study Deposit that is greater than the amount required by this section, such Interconnection Customers will receive a refund equal to the difference between the amount originally posted and the amount required under this section within thirty (30) calendar days of a FERC order accepting this provision.
- (ii) A completed application in the form of GIP Appendix 1, including requested deliverability status, requested study process (either Queue Cluster or Independent Study Process), preferred Point of Interconnection and voltage level, and all other required technical data.
- (iii) Demonstration of Site Exclusivity or, for Interconnection Requests in a Queue Cluster, a posting of a Site Exclusivity Deposit of \$100,000 for a Small Generating Facility or \$250,000 for a Large Generating Facility. 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.

3.5.1.1 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 and to meet and otherwise communicate with Interconnection Customers with respect to their Interconnection Requests.

Except for proposed Generating Facilities processed under the Fast Track Process set forth in Section 5 of this GIP, 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 GIP Section 3.8 on or before thirty (30) calendar days following the Scoping Meeting, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Interconnection Study Deposit, including interest

earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceed the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.

- (b) Should an Interconnection Request made under GIP Section 3.5.1 be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under GIP 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 (or the latest date permitted under this GIP for a Results Meeting if a customer elects not to have a Results Meeting) for the Phase I Interconnection Study or the System Impact Study for Generating Facilities processed under the Independent Study Process, 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 and Participating TOs have incurred on the Interconnection Customer's behalf or one-half of the original Interconnection Study Deposit up to a maximum of \$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 be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under GIP Section 3.8 at any time more than thirty (30) calendar days after the Results Meeting (or the latest date permitted under this GIP for a Results Meeting if a customer elects not to have a Results Meeting) for the Phase I Interconnection Study, or the System Impact Study for proposed Generating Facilities processed under the Independent Study Process, the Interconnection Study Deposit shall be non-refundable.
- (d) Upon execution of a GIA by an Interconnection Customer, the CAISO and the applicable Participating TOs, or the approval by FERC of an unexecuted GIA, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceeds the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.

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

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

3.5.1.2 Obligation for Study Costs.

Except as otherwise provided in GIP Section 3.5.1.1, 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 Participating TO and any third parties performing work on the Interconnection Customer's behalf shall invoice the CAISO for such work, and 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.

3.5.1.3 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 GIP 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 a GIA or requests the filing of an unexecuted GIA under GIP Section 11 if Site Exclusivity has not been demonstrated.

3.5.1.4 Proposed Commercial Operation Date.

The proposed Commercial Operation Date of the new 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 Generating Facility or increase in capacity of the existing Generating Facility will take longer than the seven year period.

3.5.2 Validation of Interconnection Request.

3.5.2.1 Acknowledgment of Interconnection Request.

The CAISO shall notify the Interconnection Customer within ten (10) Business Days of receipt of the Interconnection Request, which notice shall state whether the Interconnection Request is deemed complete, valid, and ready to be studied.

3.5.2.2 Deficiencies in Interconnection Request.

An Interconnection Request will not be considered to be a valid request until the CAISO determines that the information contained in the Interconnection Request is complete and the Interconnection Customer has provided all items in satisfaction of GIP Section 3.5.1.

If an Interconnection Request fails to meet the requirements set forth in GIP Section 3.5.1, the CAISO shall include in its notification to the Interconnection Customer under GIP Section 3.5.2.1 the reasons for such failure and that the Interconnection Request does not constitute a valid request. The Interconnection Customer shall provide the CAISO the additional requested information needed to constitute a valid request. Whenever additional requested information is provided by the Interconnection Customer, the CAISO shall notify the Interconnection Customer within five (5) 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 GIP 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 GIP Section 3.5.1 no later than twenty (20) Business Days after the close of the applicable Cluster Application Window or ten (10) Business 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 GIP Section 3.5.1 within twenty (20) Business Days after the close of the applicable Cluster Application Window or ten (10) Business Days after the CAISO first provided notice that the Interconnection Request was not valid, whichever is later, will be deemed invalid and will not be included in Interconnection Study Cycle or otherwise studied...

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

3.6 Internet Posting

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

Except in the case of an Affiliate, the list will not disclose the identity of the Interconnection Customer until the Interconnection Customer executes a GIA or requests that the applicable Participating TO(s) and the CAISO file an unexecuted GIA 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 secure CAISO Website portions of the Phase I Interconnection Study that do not contain customer-specific information following the final Results Meeting and portions of the Phase II Interconnection Study that do not contain customer-specific information no later than publication of the final Transmission Plan under CAISO Tariff Section 24.2.5.2.

3.7 Coordination With Affected Systems

The CAISO will notify the Affected System Operators that are potentially affected by the Interconnection Customer's Interconnection Request or Group Study within which the Interconnection Customer's Interconnection Request will be studied. The CAISO will coordinate the conduct of any studies required to determine the impact of the

Interconnection Request on Affected Systems with Affected System Operators, to the extent possible, and, if possible, the CAISO will include those results (if available) in its applicable Interconnection Study within the time frame specified in this GIP. The CAISO will include such Affected System Operators in all meetings held with the Interconnection Customer as required by this GIP. 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 GIP Section 3.5.2, if the Interconnection Customer fails to adhere to all requirements of this GIP, except as provided in GIP Section 13.5 (Disputes), the CAISO shall deem the Interconnection Request to be withdrawn and shall provide written notice to the Interconnection Customer within five (5) Business Days of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Upon receipt of such written notice, the Interconnection Customer shall have five (5) Business Days in which to respond with information or action that either cures the deficiency or supports its position that the deemed withdrawal was erroneous and notifies the CAISO of its intent to pursue Dispute Resolution.

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

In the event of such withdrawal, the CAISO, subject to the provisions of GIP Sections 13.1 and 3.5.1.1, 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 Independent Study Process

The CAISO, in coordination with the applicable Participating TO(s), will study Interconnection Requests eligible for treatment under this Independent Study Process independently from other Interconnection Requests.

All provisions of this GIP will apply unless superseded by provisions in this GIP Section 4.

4.1 Criteria for Independent Study Process Eligibility

Any Interconnection Request that meets the following criteria will be processed under the Independent Study Process:

- 4.1.1 The Interconnection Customer must provide, along with its Interconnection Request, an objective demonstration that inclusion in a Queue Cluster will not accommodate the desired Commercial Operation Date for the Generating Facility. As part of this demonstration, the Interconnection Customer must show that the desired Commercial Operation Date is physically and commercially achievable, by demonstrating at least two of the following:
 - (i) The Interconnection Customer has obtained, or has demonstrated the ability to obtain, all regulatory approvals and permits needed to complete construction in time to meet the Generating Facility's requested Commercial Operation Date.
 - (ii) The Interconnection Customer is able to provide, or has demonstrated the ability to obtain, a purchase order for generating equipment specific to the proposed Generating Facility, or a statement signed by an officer or authorized agent of the Interconnection Customer demonstrating that the Interconnection Customer has a commitment for the supply of its major generating equipment in time to meet the Commercial Operation Date through a purchase agreement to which the Interconnection Customer is a party.
 - (iii) The Interconnection Customer can provide reasonable evidence of adequate financing or other financial resources necessary to make the Interconnection Financial Security postings required in Sections 9.2 and 9.3 of this GIP.
- **4.1.2** The Interconnection Customer must demonstrate Site Exclusivity.
- 4.1.3 The proposed Generating Facility must be electrically independent of Interconnection Requests included in an existing Queue Cluster, pursuant to GIP Section 4.2, and, in addition, must be electrically independent of any other Generating Facility that is currently being studied under an earlier-queued Independent Study Process Interconnection Request.
- 4.1.4 The CAISO will inform an Interconnection Customer whether it has satisfied the requirements set forth in Sections 4.1.1 and 4.1.2 of the GIP within fifteen (15) Business Days of receiving the Interconnection Request.
- 4.1.5 The CAISO will inform an Interconnection Customer whether it has satisfied the requirement that it be electrically independent of other Interconnection Requests, pursuant to Section 4.2 of the GIP, within fifteen (15) Business Days of receiving the Interconnection Request.
- 4.1.6 Any Interconnection Request that does not satisfy the criteria set forth in Sections 4.1.1, 4.1.2, and 4.1.3 of the GIP shall be deemed withdrawn, without prejudice to the Interconnection Customer submitting a request at a later date, unless the Interconnection Customer notifies the CAISO in writing within ten (10) Business Days that it wishes the CAISO to hold the Interconnection Request for inclusion in the next Queue Cluster, in which event the CAISO will do so.

4.2 Determination of Electrical Independence

Each Interconnection Request submitted under the Independent Study Process must pass both the flow impact test and the short circuit test set forth in this GIP Section 4.2 in order to qualify for the Independent Study Process. The available power flow and short circuit Base Cases that are being used for the most recent Queue Cluster will be used as the starting Base Cases for these tests.

4.2.1 Flow Impact Test

The CAISO, in coordination with the applicable Participating TO(s), will perform the flow impact test for each Interconnection Request requesting to be processed under the Independent Study Process as follows:

- Identify the transmission facility closest, in terms of electrical distance, to (i) the proposed Point of Interconnection of the Generating Facility being tested that will be electrically impacted, either as a result of Network Upgrades identified or reasonably expected to be needed by Generating Facilities currently being studied in a Queue Cluster, or as a result of Network Upgrades identified or reasonably expected to be needed by earlier queued Generating Facilities currently being studied through the Independent Study Process. If the current Queue Cluster studies or earlier queued Independent Study Process studies have not yet determined which transmission facilities electrically impacted by the Generating Facility being tested require Network Upgrades, and the CAISO cannot reasonably anticipate whether such transmission facilities will require Network Upgrades from other data, then the CAISO will wait to conduct the independence analysis under this section until sufficient information exists in order to make this determination.
- (ii) The incremental power flow on the transmission facility identified in Section 4.2.1(i) that is caused by the Generating Facility being tested will be divided by the lesser of the Generating Facility's size or the transmission facility capacity. If the result is five percent (5%) or less, the Generating Facility shall pass the flow impact test. If the Generating Facility being tested is tested against the nearest transmission facility and that transmission facility has been impacted by a cluster that required an upgrade as a result of a contingency, then that contingency will be used when applying the flow impact test.
- (iii) If the Generating Facility being tested under the flow impact test is reasonably expected to impact transmission facilities that were identified, per Section 4.2.1 (i), when testing one or more earlier queued Generating Facilities currently being studied through the Independent Study Process, then an additional aggregate power flow test shall be performed on these earlier identified transmission facilities. The aggregate power flow test shall require that the aggregated power flow of the Generating Facility being tested, plus the flow of all earlier queued Generating Facilities currently being studied under the Independent Study Process that were tested against the transmission facilities described in the previous sentence, must be five (5) percent or less of those transmission facilities' capacity.

However, even if the aggregate power flow on any transmission facility tested pursuant to this section (iii) is greater than five (5) percent of the transmission facility's capacity but the incremental power flow as a result of the Generating Facility being tested is one (1) percent or less than of the transmission facility's capacity, the Generating Facility shall pass the test.

If the Generating Facility being tested is tested against the nearest transmission facility and that transmission facility has been impacted by a cluster that required an upgrade as a result of a contingency, then that contingency will be used when applying the flow impact test.

The Generating Facility being tested must pass both this aggregate test as well as the individual flow test described in Section 4.2.1 (ii), in no particular order.

4.2.2 Short Circuit Test

If the short circuit contribution from the Generating Facility (existing or proposed) being tested at the transmission facility identified in GIP Section 4.2.1(i) is less than 100 amperes, the Generating Facility shall pass the short circuit test.

4.3 Scoping Meeting

Within five (5) Business Days after the CAISO notifies the Interconnection Customer that if the Generating Facility associated with its Interconnection Request has satisfied the independence test set forth in GIP Section 4.2, the CAISO shall establish a date agreeable to the Interconnection Customer and the applicable Participating TO(s) for the Scoping Meeting. With input from the Participating TO, the CAISO shall evaluate whether the Interconnection Request is at or near the boundary of an affected Participating TO(s)' service territory or of any other Affected System(s) so as to potentially affect such third parties, and, if such is the case, the CAISO shall invite the affected Participating TO(s) and/or Affected System Operator(s), in accordance with GIP Section 3.7, to the Scoping Meeting by informing such third parties, as soon as practicable, of the time and place of the scheduled Scoping Meeting.

The purpose of the Scoping Meeting shall be to discuss the Interconnection Request and review existing studies relevant to the Interconnection Request. The applicable Participating TO(s) and the CAISO will bring to the meeting, as reasonably necessary to accomplish its purpose, 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. The Interconnection Customer will bring to the Scoping Meeting, in addition to the technical data in Attachment A to GIP 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. The CAISO shall prepare minutes from the meeting, and provide an opportunity for other attendees and the Interconnection Customer to confirm the accuracy thereof. The Scoping Meeting may be omitted by agreement of the Interconnection Customer, Participating TO, and the CAISO.

The CAISO shall, no later than five (5) Business Days after the Scoping Meeting (or agreement to forego such Scoping Meeting), provide the Interconnection Customer with a Independent Study Process Study Agreement (in the form set forth in Appendix 6 to the GIP), which shall contain an outline of the scope of the system impact and facilities studies and a non-binding good faith estimate of the cost to perform the studies. The Interconnection Customer shall return the executed Independent Study Process Study Agreement or request an extension of time for good cause within thirty (30) Business Days thereafter, or the Interconnection Request shall be deemed withdrawn.

4.4 System Impact Study

- 4.4.1 The system impact study will consist of a short circuit analysis, a stability analysis, a power flow analysis, an assessment of the potential magnitude of financial impacts, if any, on Local Furnishing Bonds, and a proposed resolution, and any other studies that are deemed necessary.
- **4.4.2** The system impact study shall state the assumptions upon which it is based, state the results of the analyses, and provide the requirement or potential impediments to

providing the requested Interconnection Service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the Interconnection.

- 4.4.3 The system impact study shall provide a list of Interconnection Facilities and Reliability Network Upgrades that are required as a result of the Interconnection Request along with a non-binding good faith estimate of cost responsibility and the amount of construction time required. The good faith estimate will be based on the Per Unit Costs as described in GIP Section 6.6.
- The system impact study will be completed and the results transmitted to the Interconnection Customer within ninety (90) calendar days after the execution of an Independent Study Process Study Agreement. The Interconnection Customer shall execute the agreement(s) and deliver them to the CAISO, and shall make its initial posting of Interconnection Financial Security, within thirty days (30) calendar days after being provided with the final system impact study report, in accordance with GIP Section 9.2, or its Interconnection Request shall be deemed withdrawn.
- 4.4.5 If requested by the Interconnection Customer, a Results Meeting shall be held among the CAISO, the applicable Participating TO(s), and the Interconnection Customer to discuss the results of the system impact study report, including assigned cost responsibility. The CAISO shall prepare minutes from the meeting. Any such Results Meeting will be held within 20 Business Days of the date the system impact study report is provided to the Interconnection Customer.
- 4.4.6 For Interconnection Requests under the Independent Study Process, the initial posting of Interconnection Financial Security described in GIP Section 9.2 will be based on the cost responsibility for Network Upgrades, and Participating TO's Interconnection Facilities set forth in the system impact study. If the system impact study is waived, then such posting will be based upon the cost responsibility set forth in the facilities study described in GIP Section 4.5.

4.5 Facilities Study

- The facilities study shall specify and estimate the cost of the equipment, engineering, procurement, and construction work (including overheads) needed to implement the conclusions of the system impact study, including, if applicable, the cost of remedial measures that address the financial impacts, if any, on Local Furnishing Bonds. The facilities study shall also identify (1) the electrical switching configuration of the equipment, including, without limitation, transformer, switchgear, meters, and other station equipment, (2) the nature and estimated cost of the Participating TO's Interconnection Facilities and upgrades necessary to accomplish the Interconnection, and (3) an estimate of the time required to complete the construction and installation of such facilities or for effecting remedial measures that address the financial impacts, if any, on Local Furnishing Bonds.
- 4.5.2 The facilities study may be waived if the system impact study does not identify any Interconnection Facilities and Reliability Network Upgrades.
- 4.5.3 The facilities study will be completed within ninety (90) calendar days after the Interconnection Customer posts Interconnection Financial Security in accordance with GIP Section 9.2 where Network Upgrades are identified. In cases where no Network Upgrades are identified and the required facilities are limited to Interconnection Facilities only, the facilities study will be completed within sixty (60) calendar days after the Interconnection Customer posts Interconnection Financial Security in Accordance with GIP Section 9.2.

- 4.5.4 If requested by the Interconnection Customer within ten (10) Business Days of the date of the facilities study report, a Results Meeting shall be held among the CAISO, the applicable Participating TO(s), and the Interconnection Customer to discuss the results of the facilities study report, including assigned cost responsibility. The CAISO shall prepare minutes from the meeting. Any such Results Meeting will be held within twenty (20) Business Days of the date the facilities study report is provided to the Interconnection Customer.
- 4.5.5 For Interconnection Requests under the Independent Study Process, the second posting and third postings of Interconnection Financial Security described in GIP Section 9.3 will be based on the cost responsibility for Network Upgrades and the Participating TO's Interconnection Facilities set forth in the facilities study.

4.6 Deliverability Assessment

Interconnection Customers under the Independent Study Process that request Full Capacity Deliverability Status will have a Deliverability Assessment performed as part of the next scheduled Phase I and Phase II Interconnection Studies for Queue Clusters. If the Deliverability Assessment identifies any Delivery Network Upgrades that are triggered by the Interconnection Request, the Interconnection Customer will be responsible to pay its proportionate share of the costs of those Upgrades, pursuant to Sections 6 and 7 of this GIP. If the Generating Facility achieves its Commercial Operation Date before the Deliverability Assessment is completed and any necessary Delivery Network Upgrades are in service, the proposed Generating Facility will be treated as an Energy-Only Deliverability Status Generating Facility until such Delivery Network Upgrades are in service.

4.7 Extensions of Commercial Operation Date

Extensions of the Commercial Operation Date for Interconnection Requests under the Independent Study Process will not be granted except for circumstances beyond the control of the Interconnection Customer.

Section 5 Fast Track Process

5.1 Applicability and Initiation of Fast Track Process Request

An Interconnection Customer may request interconnection of a proposed Generating Facility to the CAISO Controlled Grid under the Fast Track Process if the Generating Facility is no larger than 5 MW and if the Interconnection Customer's proposed Generating Facility meets the codes, standards, and certification requirements of Appendices 9 and 10 of this GIP, or if the applicable Participating TO notifies the CAISO that it has reviewed the design for or tested the proposed Small Generating Facility and has determined that the proposed Generating Facility may interconnect consistent with Reliability Criteria and Good Utility Practice.

To initiate an Interconnection Request under the Fast Track Process, the Interconnection Customer must provide the CAISO with:

- (i) a completed Interconnection Request as set forth in Appendix 1 to the GIP;
- (ii) a non-refundable processing fee of \$500 and a study deposit of \$1,000; and
- (iii) a demonstration of Site Exclusivity. For the Fast Track Process, such demonstration may include documentation reasonably demonstrating a right to locate the Generating Facility on real estate or real property improvements owned, leased, or otherwise legally held by another.

The CAISO shall review and validate the Fast Track Process Interconnection Request pursuant to GIP Section 5.2.

All provisions of this GIP will apply unless superseded by provisions in this GIP Section 5.

5.2 Initial Review

Within fifteen (15) Business Days after the CAISO notifies the Interconnection Customer that the Interconnection Request is deemed complete, valid, and ready to be studied, the applicable Participating TO shall perform an initial review using the screens set forth in GIP Section 5.3 below, shall notify the Interconnection Customer of the results, and shall include with the notification copies of the analysis and data underlying the Participating TO's determinations under the screens.

5.3 Screens

- 5.3.1 The proposed Generating Facility must pass the following screens to be eligible for Interconnection under this Fast Track Process:
- **5.3.1.1** The proposed Generating Facility's Point of Interconnection must be on the CAISO Controlled Grid.
- 5.3.1.2 For interconnection of a proposed Generating Facility to a radial transmission circuit, the aggregated generation on the circuit, including the proposed Generating Facility, shall not exceed 15 percent of the line section annual peak load as most recently measured at the substation. For purposes of this GIP Section 5.3.1.2, a line section shall be considered as that portion of a Participating TO's electric system connected to a customer bounded by automatic sectionalizing devices or the end of the transmission line.
- 5.3.1.3 For interconnection of a proposed Generating Facility to the load side of spot network protectors, the proposed Generating Facility must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of 5 percent of a spot network's maximum load or 50 kW. For purposes of this GIP Section 5.3.1.3, a spot network shall be considered as a type of distribution system found in modern commercial buildings for the purpose of providing high reliability of service to a single retail customer.
- 5.3.1.4 The proposed Generating Facility, in aggregation with other generation on the transmission circuit, shall not contribute more than 10 percent to the transmission circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of change of ownership.
- 5.3.1.5 The proposed Generating Facility, in aggregate with other generation on the transmission circuit, shall not cause any transmission protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or Interconnection Customer equipment on the system to exceed 87.5 percent of the short circuit interrupting capability; nor shall the interconnection proposed for a circuit that already exceeds 87.5 percent of the short circuit interrupting capability.
- 5.3.1.6 The Generating Facility, in aggregate with other generation interconnected to the transmission side of a substation transformer feeding the circuit where the Generating Facility proposes to interconnect shall not exceed 10 MW in an area where there are known, or posted, transient stability limitations to generating units located in the general electrical vicinity (e.g., three or four transmission busses from the Point of Interconnection).

- 5.3.2 If the proposed interconnection passes the screens and no Upgrades are reasonably anticipated, the Interconnection Request shall be approved. Within fifteen (15) Business Days thereafter, the Participating TO will provide the Interconnection Customer with a Small Generator Interconnection Agreement for execution.
- 5.3.3 If the proposed interconnection fails the screens and no Upgrades are reasonably anticipated, but the CAISO and Participating TO determine that the Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards under these procedures, the Participating TO shall, within fifteen (15) Business Days, provide the Interconnection Customer with a Small Generator Interconnection Agreement for execution.
- 5.3.4 If the proposed interconnection passes the screens and Upgrades are reasonably anticipated, the CAISO and Participating TO shall provide the Interconnection Customer with the opportunity to attend a customer options meeting as described in GIP Section 5.4.

5.4 Customer Options Meeting

If the CAISO and Participating TO determine the Interconnection Request cannot be approved without modifications at minimal cost; or a supplemental study or other additional studies or actions; or at significant cost to address safety, reliability, or power quality problems, within the five (5) Business Day period after the determination, the CAISO and Participating TO shall notify the Interconnection Customer and provide copies of all data and analyses underlying its conclusion. Within ten (10) Business Days of the CAISO and Participating TO's determination, the CAISO and Participating TO shall offer to convene a customer options meeting with the CAISO and Participating TO to review possible Interconnection Customer facility modifications or the screen analysis and related results, to determine what further steps are needed to permit the Small Generating Facility to be connected safely and reliably. At the time of notification of the CAISO and Participating TO's determination, or at the customer options meeting, the CAISO and Participating TO shall:

- 5.4.1 Offer to perform facility modifications or modifications to the Participating TO's electric system (e.g., changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the limited cost to make such modifications to the Participating TO's electric system; or
- 5.4.2 Offer to perform a supplemental review if the CAISO and Participating TO concludes that the supplemental review might determine that the Generating Facility could continue to qualify for interconnection pursuant to the Fast Track Process, and provide a non-binding good faith estimate of the costs of such review; or
- 5.4.3 Obtain the Interconnection Customer's agreement to continue evaluating the Interconnection Request under the Independent Study Process or Cluster Study Process.

5.5 Supplemental Review

If the Interconnection Customer agrees to a supplemental review, the Interconnection Customer shall agree in writing within fifteen (15) Business Days of the offer, and submit a deposit for the estimated costs in an amount reasonably determined by the CAISO and Participating TO. The Interconnection Customer shall be responsible for the CAISO and Participating TO's actual costs for conducting the supplemental review. The Interconnection Customer must pay any review costs that exceed the deposit within twenty (20) Business Days of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced costs, the CAISO and Participating TO will return such excess, without interest, within twenty (20) Business Days of the invoice.

- 5.5.1 Within ten (10) Business Days following receipt of the deposit for a supplemental review, the CAISO and Participating TO will determine if the Small Generating Facility can be interconnected safely and reliably.
- 5.5.1.1 If so, then, within fifteen (15) Business Days of such a determination, the Participating TO shall forward a Small Generator Interconnection Agreement to the Interconnection Customer for execution.
- If so, and Interconnection Customer facility modifications are required to allow the Generating Facility to be interconnected consistent with safety, reliability, and power quality standards, the Participating TO shall forward a Small Generator Interconnection Agreement to the Interconnection Customer for execution within fifteen (15) Business Days after confirmation that the Interconnection Customer has agreed to pay for the identified modifications to the Participating TO's electric system.
- If so, and Upgrades to the Participating TO's electric system are required to allow the Small Generating Facility to be interconnected consistent with safety, reliability, and power quality standards, the Participating TO shall forward a Small Generator Interconnection Agreement to the Interconnection Customer for execution within fifteen (15) Business Days that requires the Interconnection Customer to pay the costs of such system modifications prior to interconnection.
- 5.5.2 If not, the Interconnection Request will be deemed withdrawn, without prejudice to the Interconnection Customer resubmitting its Interconnection Request for processing in either a Queue Cluster or under the Independent Study Process.

Section 6 Interconnection Study Process for Queue Clusters

The provisions of this Section 6 of this GIP shall apply to all Interconnection Requests except those processed under the Independent Study Process as set forth in Section 4 of this GIP, the Fast Track Process as set forth in Section 5 of this GIP, or the 10 kW inverter process as set forth in Appendix 7 of this GIP.

6.1 Generator Interconnection Study Process Agreement

Within thirty (30) calendar days of the close of a Cluster Application Window, the CAISO shall provide to each Interconnection Customer with a valid Interconnection Request received during the Cluster Application Window a pro forma Generator Interconnection Study Process Agreement in the form set forth in Appendix 3 of this GIP. The pro forma 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 GIP. Within three (3) Business Days following the Scoping Meeting, the Interconnection Customer shall specify for inclusion in the attachment to the 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 Generator Interconnection Study Process Agreement. The Interconnection Customer shall execute and deliver to the CAISO the Generator Interconnection Study Process Agreement no later than thirty (30) calendar days after the Scoping Meeting.

6.2 Scoping Meeting

Within five (5) Business Days after the CAISO notifies the Interconnection Customer of a Interconnection Request that is complete, valid, and ready for study, 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 a Cluster Application Window, unless otherwise mutually agreed upon by the Parties. The CAISO shall evaluate whether the Interconnection Request is at or near the boundary of an affected Participating TO(s) service territory or of any other Affected System(s) so as to potentially affect such third parties, and, in such case, the CAISO shall invite the affected Participating TO(s), and/or Affected System Operator(s) in accordance with GIP Section 3.7, to the Scoping Meeting by informing such third parties of the time and place of the scheduled Scoping Meeting as soon as practicable.

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

The Interconnection Customer will bring to the Scoping Meeting, in addition to the technical data in Attachment A to GIP 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, and provide the Interconnection Customer and the other attendees an opportunity to confirm the accuracy thereof, 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.

6.3 Grouping Interconnection Requests

At the CAISO's option, and in coordination with the applicable Participating TO(s), Interconnection Requests received during the two Cluster Application Windows for a particular year 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 Generating Facility from other Generating Facilities with Interconnection Requests in the two Cluster Application Windows for a particular year.

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 GIP. 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.

6.4 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 two Cluster Application Windows for a particular year 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 GIP Section 6.5, 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 GIP Section 6.5.2. 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).

6.5 Identification And Cost Allocation for Network Upgrades

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

The cost of all Reliability Network Upgrades identified in the Phase I Interconnection Study shall be estimated in accordance with GIP Section 6.6. The estimated costs of short circuit related 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 short circuit duty contribution of each Generating Facility. The estimated costs of all other 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 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. 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.

6.5.2 Delivery Network Upgrades.

6.5.2.1 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 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 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 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 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 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 GIP Section 6.9.2 or change the Interconnection Request's Full Capacity Deliverability Status for purposes of financing under GIP Section 12.3.1.

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

The cost of all Delivery Network Upgrades identified in the On-Peak Deliverability Assessment as part of a Phase I Interconnection Study shall be estimated in accordance with GIP 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 Generating Facility on the Delivery Network Upgrades as determined by the Generation

distribution factor methodology set forth in the On-Peak Deliverability Assessment methodology.

6.5.2.2 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 GIP Section 6.9.2 or change the Interconnection Request's Full Capacity Deliverability Status for purposes of financing under GIP 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 GIP Section 6.6. The estimated costs of Delivery Network Upgrades identified in the Off-Peak Deliverability Assessment shall be assigned to each Interconnection Request included in the Group Study or studied individually based on the flow impact of each such LCRIG on the Delivery Network Upgrades as determined by the Generation distribution factor methodology set forth in the Off-Peak Deliverability Assessment methodology.

6.6 Use Of Per Unit Costs To Estimate Network Upgrade Costs

Each Participating TO, under the direction of the CAISO, shall publish per unit costs for facilities generally required to interconnect Generation to their respective systems.

These per unit costs shall reflect the anticipated cost of procuring and installing such facilities during the current Interconnection Study Cycle, and may vary among Participating TOs and within a Participating TO Service Territory based on geographic and other cost input differences, and should include an annual adjustment for the following ten (10) years to account for the anticipated timing of procurement to accommodate a potential range of Commercial Operation Dates of Interconnection Requests in the Interconnection Study Cycle. The per unit costs will be used to develop the cost of Reliability Network Upgrades, Delivery Network Upgrades and Participating TO's Interconnection Facilities under this GIP 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 GIP.

6.7 Phase I Study Costs Form Basis Of Financial Security

The costs assigned to Interconnection Customers for Network Upgrades under this Section 6 of the GIP shall establish the maximum value for the Interconnection Financial Security required from each Interconnection Customer under GIP 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 GIP are estimates only that establish the basis for the initial Interconnection Financial Security required from each Interconnection Customer under GIP Section 9.2.

6.8 Phase I Interconnection Study Procedures

The CAISO shall coordinate the Phase I Interconnection Study with applicable Participating TO(s) pursuant to GIP Section 3.2 and any Affected System that is affected by the Interconnection Request pursuant to GIP 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 commence the Phase I Interconnection Study by June 1 of each year, and to complete and publish to Interconnection Customers the Phase I Interconnection Study report within one hundred thirty-four (134) days after the annual commencement of the Phase I Interconnection Study; 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 two associated Cluster Application Windows, study complexity, and reasonable availability of subcontractors as provided under GIP Section 13.2. The CAISO will share applicable study results with the applicable Participating TO(s) for review and comment and will incorporate comments into the study report. The CAISO will issue a final Phase I Interconnection Study report to the Interconnection Customer. At the time of completion of the Phase I Interconnection Study, the CAISO may, at the Interconnection Customer's request, determine whether the provisions of GIP 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 two associated Cluster Application Windows, 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 GIP Section 13.1.

6.9 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. The CAISO shall prepare the minutes from the meetings, and provide the Interconnection Customer and the other attendees an opportunity to confirm the accuracy thereof.

6.9.1 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 Generating Facility have been identified in the Phase I Interconnection Study, such as telecommunications equipment to support a possible Special Protection System (SPS), distribution feeders to support back feed, new substation, and/or expanded substation work, permitting and material procurement lead times may result in the need to alter the proposed Commercial Operation Date. The Parties may agree to a new Commercial Operation Date. In addition, where an Interconnection Customer intends to establish Commercial Operation separately for different Electric Generating Units or project phases at its Generating Facility, it may only do so in accordance with an implementation plan agreed to in advance by the CAISO and Participating TO, which agreement shall not be unreasonably withheld. Where the parties cannot agree, the Commercial Operation Date determined reasonable by the CAISO, in coordination with the applicable Participating TO(s), will be used for the Phase II Interconnection Study where the changed Commercial Operation Date is needed to accommodate the anticipated completion, assuming Reasonable Efforts by the applicable Participating TO(s), of necessary Reliability Network Upgrades and/or Participating TO's Interconnection Facilities, pending the outcome of any relief sought by the Interconnection Customer under GIP 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 GIP Section 13.5.

6.9.2 Modifications.

- At any time 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.
- At the Phase I Interconnection Study Results Meeting, the Interconnection Customer should be prepared to discuss any desired modifications to the Interconnection Request. After the publication of the final Phase I Interconnection Study, but no later than five (5) Business Days following the Phase I Interconnection Study 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.

Modifications permitted under this Section 6.9.2 shall include specifically: (a) a decrease in the electrical output (MW) of the proposed project; (b) modifying the technical parameters associated with the Generating Facility technology or the Generating Facility

step-up transformer impedance characteristics; and (c) modifying the interconnection configuration.

For any modification other than these, 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 GIP Section 6.9.2, shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

The Interconnection Customer shall remain eligible for the Phase II Interconnection Study if the modifications are in accordance with this GIP Section 6.9.2.

Section 7 Phase II Interconnection Study for Queue Clusters

The provisions of this Section 7 of this GIP shall apply to all Interconnection Requests except those processed under the Independent Study Process, as set forth in Section 4 of this GIP, the Fast Track Process, as set forth in Section 5 of this GIP, or the 10 kW inverter process as set forth in Appendix 7 of this GIP.

7.1 Scope Of Phase II Interconnection Study

Within five (5) Business Days following the Phase I Interconnection Study 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 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 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 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 Generating Facilities selecting Full Capacity Deliverability Status, (v) assign responsibility for financing Delivery Network Upgrades needed to interconnect those 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 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 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 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 Controlled Grid to implement the conclusions of the updated Phase II Interconnection Study technical analyses in accordance with Good Utility Practice to physically and electrically connect the Interconnection Customer's Interconnection Facilities to the CAISO Controlled Grid. The Phase II Interconnection Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Participating TO's Interconnection Facilities and Network Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities.

7.2 Phase II Study Coordinated To Transmission Planning Process

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

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

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

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

7.3 Financing Of Reliability Network Upgrades

The responsibility to finance final Reliability Network Upgrades identified in the Phase II Interconnection Study of an Interconnection Request studied separately shall be assigned solely to that Interconnection Request up to the cost assignment for Reliability Network Upgrades under GIP Section 6.5.1. The responsibility to finance final short circuit related 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 short circuit duty contribution of each Generating Facility up to the cost assignment for Reliability Network Upgrades under GIP Section 6.5.1. The responsibility to finance all other 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 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 GIP Section 6.5.1.

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 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 GIP Sections 6.5.2.1 and 6.5.2.2.

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 GIP 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 commence the Phase II Interconnection Study by January 15 of each year, and to complete and publish to Interconnection Customers the Phase II Interconnection Study report within one hundred ninety-six (196) calendar days after the annual commencement of the Phase II Interconnection Study. 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 GIP Section 13.1.

7.6 Accelerated Phase II Interconnection Study Process

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

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

7.7 Meeting With The CAISO And Applicable Participating TO(s)

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

Section 8 Additional Deliverability Assessment Options

8.1 One-Time Full Capacity Deliverability Option

- **8.1.1** A Large Generating Facility previously studied as Energy-Only Deliverability Status under the CAISO Tariff, or a Small Generating Facility studied under the provisions of Appendix S of the CAISO Tariff, will have a one-time option to be studied for Full Capacity Deliverability Status.
- **8.1.2** An Interconnection Customer must make such election within the Cluster Application Window for the CAISO's fourth Queue Cluster, which will open on March 1, 2011.
- **8.1.3** Any Interconnection Customers selecting this option will be studied as part of the Phase I and Phase II Interconnection Studies for the CAISO's fourth Queue Cluster.
- 8.1.4 Interconnection Customers electing this one-time option will be required to post a study deposit in the amount set forth in Section 3.5.1 of this GIP, less any study deposit amounts already paid if the Interconnection Customer's Generating Facility is still in the CAISO's interconnection queue.

8.2 Annual Full Capacity Deliverability Option

8.2.1 A Generating Facility previously studied as Energy-Only Deliverability Status under the CAISO Tariff, or a Small Generating Facility studied under the provisions of Appendix S of the CAISO Tariff will have an annual option to be studied to determine whether it can be designated for Full Capacity Deliverability Status using available transmission capacity. An Interconnection Customer must make such a request within a Cluster

- Application Window, beginning with the Cluster Application Window for the CAISO's fifth Queue Cluster, which will open on March 1, 2012.
- **8.2.2** Any Interconnection Customer selecting this option will be studied immediately following the Phase II Interconnection Studies associated with the Queue Cluster during which the Interconnection Customer submits its request, typically June through August annually.
- **8.2.3** Interconnection Customers that wish to participate in this annual process must submit an Interconnection Request as set forth in Appendix 1 to the GIP along with a non-refundable \$10,000 study fee.
- **8.2.4** After allocating transmission system capability, including capability associated with both existing capability and capability relating to approved transmission upgrades, to Interconnection Customers in the Queue Cluster who originally requested Full Capacity Deliverability Status in the Phase II Interconnection Study, the CAISO will perform additional studies using the deliverability study procedures set forth in Section 6.5.2 of this GIP to determine the availability of any remaining transmission system capability for to those Interconnection Customers requesting Full Capacity Deliverability Status as part of the annual process described in this Section 8.
 - **8.2.4.1** In determining available transmission capability, priority will be given to Interconnection Customers whose Generating Facilities have the lowest transfer distribution factors, calculated according to the deliverability study procedures set forth in Section 6.5.2 of this GIP.
 - **8.2.4.2** If there is sufficient available transmission capability for the Interconnection Customer to deliver the full output of its Generating Unit, then the Interconnection Customer's Generating Facility will be considered to have Full Capacity Deliverability Status.
 - 8.2.4.3 If the assessment of available transmission capability conducted under this GIP Section 8.2.4 indicates that there is some transmission capacity available for use by the Interconnection Customer, but less than is necessary to deliver the full output of the Interconnection Customer's Generating Facility, then the Interconnection Customer's Generating Facility will be considered to be partially deliverable, and the amount of transmission capability made available to that Interconnection Customer's Generating Facility will be equal to the determination of available transmission capability for the Generating Facility rounded down to the nearest 50 MW increment.
- 8.3 To the extent that a Participating TO's tariff provides the option for customers taking interconnection service under the Participating TO's tariff to obtain Full Capacity Deliverability Status, the ISO will, in coordination with the applicable Participating TO, perform the necessary deliverability studies to determine the deliverability of customers electing such option. The CAISO shall execute any necessary agreements for reimbursement of study costs it incurs and to assure cost attribution for any Network Upgrades relating to any deliverability status conferred to such customers under the Participating TO's tariff.

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):

- 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):
- (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 GIP Section 9.1, the Interconnection Customer shall provide to the applicable Participating TO(s) replacement Interconnection Financial Security meeting the requirements of this GIP 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 applicable Participating TO(s) in an interest-bearing escrow account under subpart (d) of this GIP 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

- 9.2.1 The Interconnection Customer shall post, with notice to the CAISO, two separate Interconnection Financial Security instruments: (i) a posting relating to the Network Upgrades; (ii) a posting relating to the Participating TO's Interconnection Facilities.
- 9.2.2 Timing of Postings. The postings set forth in this GIP Section 9.2 shall be made on or before ninety (90) calendar days after publication of the final Phase I Interconnection Study report for Interconnection Customers in a Queue Cluster, or on or before sixty (60) calendar days after the CAISO provides the results of the System Impact Study for Interconnection Customers in the Independent Study Process,
- 9.2.3 Posting Amount for Network Upgrades.
 Each Interconnection Customer for a Small Generating Facility assigned to a Queue
 Cluster and each Interconnection Customer for a Small Generating Facility in the

Independent Study Process shall post an Interconnection Financial Security instrument in an amount equal to the lesser of fifteen percent (15%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Network Upgrades or (ii) \$20,000 per megawatt of electrical output of the Small 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, including any requested modifications thereto, but in no event less than \$50,000.

Each Interconnection Customer for a Large Generating Facility assigned to a Queue Cluster and each Interconnection Customer for a Large Generating Facility in the Independent Study Process shall post an Interconnection Financial Security instrument in an amount equal to the lesser of (i) fifteen percent (15%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Network Upgrades, (ii) \$20,000 per megawatt of electrical output of the 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, including any requested modifications thereto, or (iii) \$7,500,000, but in no event less than \$500,000.

Notwithstanding the foregoing, if the costs of the estimated Network Upgrades are less than the minimum posting amounts set forth above, the posting amount required will be equal to the estimated Network Upgrade amount.

In addition, if an Interconnection Customer switches its status from Full Capacity Deliverability Status to Energy-Only Deliverability Status within five (5) Business Days following the Phase I Interconnection Study Results Meeting, as permitted in Section 7.1 of this GIP, the required Interconnection Financial Security for Network Upgrades shall, for purposes of this section, be additionally capped at an amount no greater than the total cost responsibility assigned to the Interconnection Customer in the Phase I Interconnection Study for Reliability Network Upgrades.

- 9.2.4 Posting Amount for Participating TO's Interconnection Facilities. The Interconnection Customer shall also post an Interconnection Financial Security instrument in the amount of twenty percent (20%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for the Participating TO's Interconnection Facilities.
- 9.2.5 Consequences for Failure to Post. The failure by an Interconnection Customer to timely post the Interconnection Financial Security required by this GIP Section 9.2 shall result in the Interconnection Request being deemed withdrawn and subject to GIP Section 3.8. The Interconnection Customer shall provide the CAISO and the Participating TO with written notice that it has posted the required Interconnection Financial Security no later than the applicable final day for posting.

9.3 Additional Posting Of Interconnection Financial Security

- 9.3.1 Second Posting of Interconnection Financial Security.
 - 9.3.1.1 The Interconnection Customer shall make second postings, with notice to the CAISO, of two separate Interconnection Financial Security instruments: (i) a second posting relating to the Network Upgrades; (ii) a second posting relating to the Participating TO's Interconnection Facilities.
 - 9.3.1.2 Timing of Posting. The postings in this GIP Section 9.3.1 shall be made on or before one hundred eighty (180) calendar days after publication of the final Phase II Interconnection Study report for Interconnection Customers in a Queue Cluster, or on or before one

hundred twenty (120) calendar days after the CAISO provides the results of the Facilities Study for Interconnection Customers in the Independent Study.

Each Interconnection Customer for a Small Generating Facility assigned to a Queue Cluster and each Interconnection Customer for a Small Generating Facility in the Independent Study Process shall post an Interconnection Financial Security instrument such that the total Interconnection Financial Security posted by the Interconnection Customer for Network Upgrades equals the lesser of (i) \$1 million or (ii) thirty percent (30%) of the total cost responsibility assigned to the Interconnection Customer for Network Upgrades in either the final Phase I Interconnection Study, final Phase II Interconnection Study, System Impact Study, or Facilities Study, whichever is lower. In no event shall the total amount posted be less than \$100,000.

Each Interconnection Customer for a Large Generating Facility assigned to a Queue Cluster and each Interconnection Customer for a Large Generating Facility in the Independent Study Process shall post an Interconnection Financial Security instrument such that the total Interconnection Financial Security posted by the Interconnection Customer for Network Upgrades equals the lesser of (i) \$15 million or (ii) thirty percent (30%) of the total cost responsibility assigned to the Interconnection Customer for Network Upgrades in either the final Phase I Interconnection Study, final Phase II Interconnection Study, System Impact Study, or Facilities Study, whichever is lower. In no event shall the total amount posted be less than \$500,000.

Notwithstanding the foregoing, if the costs of the estimated Network Upgrades are less than the minimum posting amounts set forth above, the posting amount required will be equal to the estimated Network Upgrade amount.

- 9.3.1.3 Posting Amount for Participating TO's Interconnection Facilities. The Interconnection Customer shall also post an Interconnection Financial Security instrument such that the total Interconnection Financial Security posted by the Interconnection Customer for Participating TO Interconnection Facilities equals thirty percent (30%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase II Interconnection Study for Participating TO's Interconnection Facilities.
- 9.3.1.4 Early Commencement of Construction Activities. If the start date for Construction Activities of Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer is prior to one hundred eighty (180) calendar days after publication of the final Phase II Interconnection Study report for Interconnection Customers in a Queue Cluster or prior to one hundred twenty (120) calendar days after publication of the final Facilities Study report for Interconnection Customers in the Independent Study Process, that start date must be set forth in the Interconnection Customer's GIA, and the Interconnection Customer shall make its second posting of Interconnection Financial Security pursuant to GIP Section 9.3.2 rather than GIP Section 9.3.1.
- 9.3.1.5 Consequences for Failure to Post The failure by an Interconnection Customer to timely post the Interconnection Financial Security required by this GIP Section 9.3.1 shall constitute grounds for termination of the GIA pursuant to GIA Article 2.3.

9.3.2 Third Posting of Interconnection Financial Security.

On or before the start of Construction Activities for Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer, whichever is earlier, the Interconnection Customer shall modify the two separate Interconnection Financial Security instruments posted pursuant to GIP Section 9.3.1 as follows. With respect to the Interconnection Financial Security Instrument for Network Upgrades, the

Interconnection Customer shall modify this Instrument so that it equals one hundred percent (100%) of the total cost responsibility assigned to the Interconnection Customer for Network Upgrades in either the final Phase I Interconnection Study or Phase II Interconnection Study for Interconnection Customers in a Queue Cluster, or the final System Impact Study, or Facilities Study for Interconnection Customers in the Independent Study Process, whichever is lower. With respect to the Interconnection Financial Security Instrument for Participating TO Interconnection Facilities, the Interconnection Customer shall modify this instrument so that it equals one hundred percent (100%) of the total cost responsibility assigned to the Interconnection Customer for Participating TO Interconnection Facilities in the final Phase II Interconnection Study for Interconnection Customers in a Queue Cluster, or the final Facilities Study for Interconnection Customers in the Independent Study Process.

The failure by an Interconnection Customer to timely post the Interconnection Financial Security required by this GIP Section 9.3.2 shall constitute grounds for termination of the GIA pursuant to GIA Article 2.3.

9.4 Effect Of Withdrawal Or Termination On Financial Security

Except as set forth in GIP Section 9.4.1, withdrawal of an Interconnection Request or termination of a GIA 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 GIP Section 12.3 exceeds the total cost responsibility for Network Upgrades assigned to the Interconnection Customer by the final Phase I or Phase II Interconnection Study, whichever is lower, or in the governing study for the Independent Study Process, the applicable Participating TO(s) shall remit to the Interconnection Customer the excess amount.

Withdrawal of an Interconnection Request or termination of a GIA 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 GIA

A portion of the Interconnection Financial Security shall be released to the Interconnection Customer, consistent with GIP Section 9.4.2, if the withdrawal of the Interconnection Request or termination of the GIA 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 GIA, 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 Generating Facility after a good faith effort to do so. A good faith effort can be established by demonstrating participation in a competitive solicitation process or bilateral negotiations with an entity other than an Affiliate that progressed, at minimum, to the mutual exchange by all counter-parties of proposed term sheets.

- (b) Failure to Secure a Necessary Permit. At the time of withdrawal of the Interconnection Request or termination of the GIA, 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 Generating Facility.
- (c) Increase in the Cost of Participating TO's Interconnection Facilities. The Interconnection Customer withdraws the Interconnection Request or terminates the GIA 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 GIA based on a material change from the Phase I Interconnection Study in the Point of Interconnection for the 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 For Queue Cluster Generating Facilities or up to One Hundred Twenty Days After Final Facilities Study Report for Independent Study Process Generating Facilities.

If, at any time after the initial posting of the Interconnection Financial Security for Network Upgrades under GIP 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 for Interconnection Customers in a Queue Cluster, or on or before one hundred twenty (120) days after the date of issuance of the results of the Facilities Study for Interconnection Customers in the Independent Study Process, the Interconnection Customer withdraws the Interconnection Request or terminates the GIA, as applicable, in accordance with GIP Section 9.4.1, the applicable Participating TO(s) shall liquidate the Interconnection Financial Security for Network Upgrades under GIP Section 9.2 and reimburse the Interconnection Customer in an amount of (i) any posted amount less fifty percent (50%) of the value of the posted Interconnection Financial Security for Network Upgrades (with a maximum of \$10,000 per requested and approved megawatt value of the Generating Facility Capacity at the time of withdrawal being retained by the Participating TO(s)), or, (ii) if the Interconnection Financial Security has been drawn down to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer. the lesser of the remaining balance of the Interconnection Financial Security or the amount calculated under (i) above. If the Interconnection Customer has separately provided capital apart from the Interconnection Financial Security to finance Pre-Construction Activities for Network Upgrades, the applicable Participating TO(s) will credit the capital provided as if drawn from the Interconnection Financial Security and apply (ii) above.

9.4.2.2 Between One Hundred Eighty-One Days After Final Phase II Interconnection Study Report or Facilities Study Results and the Commencement of Construction Activities.

If, at any time between one hundred eighty-one (181) calendar days after the date of issuance of the final Phase II Interconnection Study report for Interconnection Customers in a Queue Cluster, or the date of issuance of the final Facilities Study Report for Interconnection Customers in the Independent Study Process, and the commencement of Construction Activities for either Network Upgrades or Participating TO's Interconnection Facilities, the Interconnection Customer withdraws the Interconnection Reguest or terminates the GIA, as applicable, in accordance with GIP Section 9.4.1, the applicable Participating TO(s) shall liquidate the Interconnection Financial Security for Network Upgrades under GIP Section 9.3 and reimburse the Interconnection Customer in an amount of (i) any posted amounts less fifty percent (50%) of the value of the posted Interconnection Financial Security for Network Upgrades (with a maximum of \$20,000 per requested and approved megawatt value of the Generating Facility Capacity at the time of withdrawal being retained by the Participating TO(s)), 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 [Not Used]

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 GIP Section 9.3, the Interconnection Customer withdraws the Interconnection Request or terminates the GIA, as applicable, in accordance with GIP Section 9.4.1(b), and the Delivery Network Upgrades to be financed by the Interconnection Customer under GIP Section 7.3 are also to be financed by one or more other Interconnection Customers, then GIP Section 9.4.2.1 shall apply, except that the Interconnection Customer shall not be reimbursed for its share of any actual costs incurred or irrevocably committed by the applicable Participating TO(s) for Construction Activities.

9.4.2.5 After Commencement of Construction Activities.

Except as otherwise provided in GIP 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 GIA by the Interconnection Customer will be treated in accordance with this GIP Section 9.4.

9.4.2.6 Notification to CAISO and Accounting by Applicable Participating TO(s).

The applicable Participating TO(s) shall 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) shall 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 GIP Section 9.4. All non-refundable portions of the Interconnection Financial Security remitted to the CAISO in accordance with this GIP 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 a GIA, 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 GIP. The E&P Agreement is an optional procedure. The E&P Agreement shall provide for the Interconnection Customer to pay the cost of all activities authorized by the Interconnection Customer and to make advance payments or provide other satisfactory security for such costs.

The Interconnection Customer shall pay the cost of such authorized activities and any cancellation costs for equipment that is already ordered for its interconnection, which cannot be mitigated as hereafter described, whether or not such items or equipment later become unnecessary. If the Interconnection Customer withdraws its application for interconnection or either Party terminates the E&P Agreement, to the extent the equipment ordered can be canceled under reasonable terms, the Interconnection Customer shall be obligated to pay the associated cancellation costs. To the extent that the equipment cannot be reasonably canceled, the applicable Participating TO(s) may elect: (i) to take title to the equipment, in which event the applicable Participating TO(s) shall refund the Interconnection Customer any amounts paid by Interconnection Customer for such equipment and shall pay the cost of delivery of such equipment, or (ii) to transfer title to and deliver such equipment to the Interconnection Customer, in which event the Interconnection Customer shall pay any unpaid balance and cost of delivery of such equipment.

Section 11 Generator Interconnection Agreement (GIA)

11.1 Tender

- 11.1.1 Within thirty (30) Calendar Days after the CAISO provides the final Phase II Interconnection Study report, or the Facilities Study report (or System Impact Study report if the Facilities Study is waived) to the Interconnection Customer, the applicable Participating TO(s) and the CAISO shall tender a draft GIA, together with draft appendices. The draft GIA shall be in the form of the FERC-approved form of LGIA set forth in CAISO Tariff Appendix T, Appendix Z, or Appendix CC, as applicable. 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 GIP 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 GIA, as appropriately modified.

11.2 Negotiation

Notwithstanding GIP 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 GIA 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 GIA for not more than ninety (90) calendar days after the CAISO provides the

Interconnection Customer with the final Phase II Interconnection Study report, or the Facilities Study report (or System Impact Study report if the Facilities Study is waived). 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 GIA pursuant to GIP Section 11.1 and request submission of the unexecuted GIA with FERC or initiate Dispute Resolution procedures pursuant to GIP 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 GIA 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 GIA, requested filing of an unexecuted GIA, or initiated Dispute Resolution procedures pursuant to GIP 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 GIA within fifteen (15) Business Days after the completion of the negotiation process.

11.3 Execution And Filing

The Interconnection Customer shall either: (i) execute the appropriate number of originals of the tendered GIA 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 a GIA in unexecuted form. The GIA shall be considered executed as of the date that all three Parties have signed the GIA. As soon as practicable, but not later than ten (10) Business Days after receiving either the executed originals of the tendered GIA (if it does not conform with a FERC-approved standard form of interconnection agreement) or the request to file an unexecuted GIA, the applicable Participating TO(s) and CAISO shall file the GIA 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 GIA. An unexecuted GIA 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 GIA, they may proceed pending FERC action.

11.4 Commencement Of Interconnection Activities

If the Interconnection Customer executes the final GIA, the applicable Participating TO(s), CAISO and the Interconnection Customer shall perform their respective obligations in accordance with the terms of the GIA, subject to modification by FERC. Upon submission of an unexecuted GIA, the Interconnection Customer, applicable Participating TO(s) and CAISO may proceed to comply with the unexecuted GIA, pending FERC action.

11.5 Interconnection Customer To Meet PTO Handbook Requirements

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 PTO's Interconnection Facilities And Network Upgrades

12.1 Schedule

The applicable Participating TO(s) and the Interconnection Customer shall negotiate in good faith concerning a schedule for the construction of the applicable Participating TO's Interconnection Facilities and the Network Upgrades.

12.2 Construction Sequencing

12.2.1 General

In general, the sequence of construction of Stand Alone Network Upgrades or other Network Upgrades for a single Interconnection Request, or Network Upgrades identified for the interconnection of Generating Facilities associated with multiple Interconnection Requests, shall be determined, to the maximum extent practical, in a manner that accommodates the proposed Commercial Operation Date set forth in the GIA 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 a GIA under this GIP, 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 GIA (or its equivalent predecessor agreement) or unexecuted GIA (or its equivalent predecessor agreement) filed with FERC, but the Network Upgrades will not otherwise be completed because such GIA 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 GIA (or its equivalent predecessor agreement) or unexecuted GIA (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 GIA (or its equivalent predecessor agreement).

The obligation under this GIP Section 12.2.2 arises only after the CAISO, in coordination with the applicable Participating TO(s), determines that the Network Upgrades remain needed to support the interconnection of the Interconnection Customer's Generating Facility notwithstanding, as applicable, the absence or delay of the Generating Facility that is contractually, or was previously contractually, associated with the Network Upgrades.

Further, to the extent the timing of such Network Upgrades was not accounted for in determining a reasonable Commercial Operation Date among the CAISO, applicable Participating TO(s), and the Interconnection Customer as part of the Phase II Interconnection Study, the applicable Participating TO(s) will use Reasonable Efforts to ensure that the construction of such Network Upgrades can accommodate the Interconnection Customer's proposed Commercial Operation Date. If, despite Reasonable Efforts, it is anticipated that the Network Upgrades cannot be constructed in time to accommodate the Interconnection Customer's proposed Commercial Operation Date, the Interconnection Customer may commit to pay the applicable Participating TO(s) any costs associated with expediting construction of the Network Upgrades to meet the original proposed Commercial Operation Date. The expediting costs under this GIP

Section 12.2.2 shall be in addition to the Interconnection Customer's cost responsibility assigned under GIP Section 6.5.

12.2.3 Advancing Construction of Network Upgrades that are Part of the CAISO's Transmission Plan

An Interconnection Customer with a GIA, in order to maintain its In-Service Date as specified in the GIA, may request that the CAISO and applicable Participating TO(s) advance to the extent necessary the completion of Network Upgrades that: (i) are necessary to support such In-Service Date and (ii) would otherwise not be completed, pursuant to an approved CAISO Transmission Plan covering the PTO Service Territory of the applicable Participating TO(s), in time to support such In-Service Date. Upon such request, the applicable Participating TO(s) will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay the applicable Participating TO(s) any associated expediting costs. The Interconnection Customer shall be entitled to refunds, if any, in accordance with this GIP and the GIA, 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 GIP 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 GIP Sections 7.3 and 7.4.

- (a) Where the funding responsibility for any Reliability Network Upgrade or Delivery Network Upgrade has been assigned to a single Interconnection Customer in accordance with this GIP, 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 GIA Article 12.1 up to a maximum amount no greater than that established by the cost responsibility assigned to each Interconnection Customer(s) under GIP 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 GIP, 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 GIA Article 12 for such Reliability Network Upgrade based on the ratio of the maximum megawatt electrical output of each new 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 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 GIP 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 GIP, 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 GIA Article 12 for such Delivery Network Upgrade based on the percentage flow impact of each assigned 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 GIP Section 7.4.

Any permissible extension of the Commercial Operation Date of a 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 Generating Facilities that have also been assigned cost responsibility for the Network Upgrades.

12.3.2 Repayment of Amounts Advanced for Network Upgrades and Refund of Interconnection Financial Security

Upon the Commercial Operation Date of the Generating Facility, which shall be the Commercial Operation Date of the entire 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 GIP 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 Generating Facility's Commercial Operation Date; or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years of the Commercial Operation Date. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment. The Interconnection Customer may assign such repayment rights to any person.

Instead of direct payments, the Interconnection Customer may elect to receive Merchant Transmission Congestion Revenue Rights (CRRs) in accordance with the CAISO Tariff Section 36.11 associated with the Network Upgrades, or portions thereof that were funded by the Interconnection Customer. Such CRRs would take effect upon the Commercial Operation Date of the Generating Facility, which shall be the Commercial Operation Date of the entire Generating Facility, if phased, in accordance with the GIA.

12.4 Special Provisions For Affected Systems, Other Affected PTOs

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 GIA, as appropriately modified.

Any repayment by the owner of the Affected System shall be in accordance with FERC Order No. 2003-B (109 FERC ¶ 61,287).

Section 13 Miscellaneous

13.1 Confidentiality

Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Parties receiving the information that the information is confidential.

If requested by any Party, the other Parties shall provide in writing, the basis for asserting that the information referred to in this Section warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

The confidentiality provisions of this GIP are limited to information provided pursuant to this GIP.

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 nonconfidential 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 GIA; or (6) is required, in accordance with GIP 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 GIP. 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. Part 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 GIP 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 GIP Section 13.1.

13.1.3 Rights

Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Parties. The disclosure by each Party to the other Parties of Confidential Information shall not be deemed a waiver by a Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

13.1.4 No Warranties

By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to the other Parties nor to enter into any further agreements or proceed with any other relationship or joint venture.

13.1.5 Standard of Care

Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under these procedures or its regulatory requirements.

13.1.6 Order of Disclosure

If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Parties with prompt notice of such request(s) or requirement(s) so that the other Parties may seek an appropriate protective order or waive compliance with the terms of the GIP. 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 GIP 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 GIP 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 GIP Section 13.1, but shall be in addition to all other remedies available at law or in equity. Further, the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this GIP Section 13.1.

13.1.8 Disclosure to FERC, its Staff, or a State

Notwithstanding anything in this GIP 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 GIP, 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 GIP 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 GIP or as a transmission service provider or a Balancing Authority including disclosing the Confidential Information to an RTO or ISO or to a subregional, regional or national reliability organization or planning group. The Party asserting confidentiality shall notify the other Parties in writing of the information it claims is confidential. Prior to any disclosures of another Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.
- **13.1.10** This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a breach of this provision).
- 13.1.11 The Participating TO or CAISO shall, at the Interconnection Customer's election, destroy, in a confidential manner, or return the Confidential Information provided at the time of Confidential Information is no longer needed.

13.2 Delegation Of Responsibility

The CAISO and the Participating TOs may use the services of subcontractors as deemed appropriate to perform their obligations under this GIP. 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 GIP. 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 GIP Section 3.8, the CAISO will forward any information regarding the disputed withdrawal received under GIP Section 3.8 within one (1) Business Day to the GIP

Executive Dispute Committee, consisting of the Vice President responsible for administration of this GIP, the CAISO Vice President responsible for customer affairs, and an additional Vice President. The GIP Executive Dispute Committee shall have five (5) Business Days to determine whether or not to restore the Interconnection Request. If the GIP 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 GIP Section 3.8, arising out of or in connection with this GIP 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 GIP 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 GIA, the GIP, 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 GIA and GIP.

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 GIP Section 13.5, the terms of this GIP 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 GIA and GIP and shall have no power to modify or change any provision of the GIA and GIP in any manner. The decision of the arbitrator(s)

shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

13.5.4 Costs

Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

13.6 Local Furnishing Bonds

13.6.1 Participating TOs That Own Facilities Financed by Local Furnishing Bonds

This provision is applicable only to a Participating TO that has financed facilities for the local furnishing of electric energy with Local Furnishing Bonds. Notwithstanding any other provisions of this GIP, the Participating TO and the CAISO shall not be required to provide Interconnection Service to the Interconnection Customer pursuant to this GIP and the GIA 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 GIP and the GIA.

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 GIA to the Interconnection Customer but the Interconnection Customer has neither executed the GIA nor requested the filing of an unexecuted GIA with

FERC, unless otherwise provided, the Interconnection Customer must complete negotiations with the applicable former Participating TO or successor entity which has the ownership of the Point of Interconnection.

Appendix 1 Interconnection Request INTERCONNECTION REQUEST

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

1.		indersigned Interconnection Customer submits this request to interconnect its Generating ty with the CAISO Controlled Grid pursuant to the CAISO Tariff (check one):
		Fast Track Process.
		_ Independent Study Process.
		_ Queue Cluster process. _ One-Time Deliverability Assessment pursuant to GIP Section 8.1.
	-	_ One-Time Deliverability Assessment pursuant to GIP Section 8.
2.	This I	nterconnection Request is for (check one):
		_ A proposed new Generating Facility.
		_ An increase in the generating capacity or a Material Modification to an existing Generating Facility.
3.		ested Deliverability Status is for (check one): Il Capacity (For Independent Study Process and Queue Cluster Process only) (Note – Deliverability analysis for Independent Study Process is conducted with the next annual Cluster Study – See GIP Section 4.6)
	_ En	ergy Only
4.	The I	nterconnection Customer provides the following information:
	a.	Address or location, including the county, of the proposed new 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:
		GPS Coordinates:
	b.	Maximum net megawatt electrical output (as defined by section 2.c of Attachment A to this appendix) of the proposed new Generating Facility or the amount of net megawatt increase in the generating capacity of an existing Generating Facility;
		mum net megawatt electrical output (MW): or Megawatt increase (MW):
	C.	Type of project (i.e., gas turbine, hydro, wind, etc.) and general description of the equipment configuration (if more than 1 type is chosen include net MW for each);

	Steam Turbine Gas Turbine Wind Hydro Photovoltaic	_ (MW) _ (MW) _ (MW) _ (MW) _ (MW) _ (MW) _ (MW) _ (MW) _ (MW)
	Other (please describe):	
d. Propose	al description of the equipment configuration (Proposed In-Service Date (first date transmis Operation date and Commercial Operation D service (dates must be sequential); sed Trial Operation Date: sed Commercial Operation Date: sed Term of Service (years):	sion is needed to the facility), Trial ate by day, month, and year and term of
	Name, address, telephone number, and e-ma Customer's contact person (primary person v	
	Name: Title: Company Name: Street Address: City, State: Zip Code: Phone Number: Fax Number: Email Address: DUNS Number:	
	Approximate location of the proposed Point of facility interconnection point name, voltage le	
g.	Interconnection Customer data (set forth in A	ttachment A)
	The Interconnection Customer shall provi for in GIP Appendix 1, Attachment A. Thro	
to CAISO Appendi	able deposit amount as specified in the GIP masso (see section 7 for details) along with the: dix 1 to GIP (Interconnection Request) for proceeding to Appendix 1 (Interconnection Request)	essing.
	ce of Site Exclusivity as specified in the GIP attion of site owner(s) (check one):	nd name(s), address(es) and contact
Deposit	ched to this Interconnection Request t in lieu of Site Exclusivity attached, Site Exclu ance with this GIP	sivity will be provided at a later date in

5.

6.

	New Resource Interconnection California ISO P.O. Box 639014 Folsom, CA 95763-9014
	Overnight address: 151 Blue Ravine Road, Folsom, CA 95630
8.	Representative of the Interconnection Customer to contact:
	[To be completed by the Interconnection Customer] Name: Title: Company Name: Street Address: City, State: Zip Code: Phone Number: Fax Number: Email Address:
9.	This Interconnection Request is submitted by: Legal name of the Interconnection Customer:
	By (signature):
	Name (type or print):
	Title:
	Date:

This Interconnection Request shall be submitted to the CAISO representative indicated below:

7.

Attachment A Generating Facility Data To GIP Appendix 1 Interconnection Request

GENERATING FACILITY DATA

Provide three copies of this completed form pursuant to Section 7 of GIP 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 and photovoltaic generator plants, 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.	Gene	erating Facility Information
	A.	Total Generating Facility rated output (MW):
	B.	Generating Facility auxiliary Load (MW):
	C.	Project net capacity (A-B)(MW):
	D.	Standby Load when Generating Facility is off-line (MW):
	E.	Number of Generating Units:
		(Please repeat the following items for each generator)
	F.	Individual generator rated output (MW for each unit):
	G.	Manufacturer:Year Manufactured:
	H.	Year Manufactured:
	I.	Nominal Terminal Voltage (kV):
	J.	Rated Power Factor (%):
	K.	Type (Induction, Synchronous, D.C. with Inverter):
	L.	Phase (three 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 net output capacity (MW) for an outage of the steam turbine or an outage of a single combustion turbine
3.		chronous Generator – General Information: ase repeat the following for each generator model)
	A.	Rated Generator speed (rpm):
	B.	Rated MVA: Rated Generator Power Factor:
	C.	Rated Generator Power Factor:
	D.	Generator Efficiency at Rated Load (%):
	E.	Moment of Inertia (including prime mover):
	F.	Inertia Time Constant (on machine base) H: sec or MJ/MVA
	G.	SCR (Short-Circuit Ratio - the ratio of the field current required for rated open-circuit voltage to the field current required for rated short-circuit current):
	H.	Please attach generator reactive capability curves.
	l.	Rated Hydrogen Cooling Pressure in psig (Steam Units only):

	J.	Please attach a plot of generator terminal voltage versus field current that shows the air gap line, the open-circuit saturation curve, and the saturation curve at full load and rated power factor.
4.		ion System Information e repeat the following for each generator model)
	A.	Indicate the Manufacturer and Type of excitation system used for the generator. For exciter type, please choose from 1 to 9 below or describe the specific excitation system. (1) Rotating DC commutator exciter with continuously acting regulator. The regulator power source is independent of the generator terminal voltage and current. (2) Rotating DC commentator exciter with continuously acting regulator. The regulator power source is bus fed from the generator terminal voltage. (3) Rotating DC commutator exciter with non-continuously acting regulator (i.e., regulator adjustments are made in discrete increments). (4) Rotating AC Alternator Exciter with non-controlled (diode) rectifiers. The regulator power source is independent of the generator terminal voltage and current (not bus-fed). (5) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers. The regulator power source is fed from the exciter output voltage. (6) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers. (7) Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from the generator terminal voltage. (8) Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from a combination of generator terminal voltage and current (compound-source controlled rectifiers system.
	B. C. D. E. F.	(9) Other (specify): Attach a copy of the block diagram of the excitation system from its instruction manual. The diagram should show the input, output, and all feedback loops of the excitation system. Excitation system response ratio (ASA): Full load rated exciter output voltage: Maximum exciter output voltage (ceiling voltage): Other comments regarding the excitation system?
5.	(Please PSS ur	System Stabilizer Information e repeat the following for each generator model. All new generators are required to install eless an exemption has been obtained from WECC. Such an exemption can be obtained to that do not have suitable excitation systems.) Manufacturer:
	B. C. D. E:	Is the PSS digital or analog?Note the input signal source for the PSS? Bus frequency Shaft speed Bus Voltage Other (specify source) 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. Other comments regarding the PSS?

	Pleas	se comple	ete Part	owing for each generator model) A for steam, gas or combined-cycle turbines, Part B for hydro turbines, and
	Part	C for both	١.	
	A.	Steam	n, gas or	combined-cycle turbines:
		(1) (2)	If stea both h	pe of unit (Steam, Gas, or Combined-cycle): m or combined-cycle, does the turbine system have a reheat process (i.e., igh and low pressure turbines)?
		(3)		m with reheat process, or if combined-cycle, indicate in the space led, the percent of full load power produced by each turbine: Low pressure turbine or gas turbine: High pressure turbine or steam turbine: """""""""""""""""""""""""""""""""""
	B.	Hydro	turbines	
		(1) (2)	Lengtl	ne efficiency at rated load:% n of penstock:ft
		(3) (4)	Typica gate, t	ge cross-sectional area of the penstock:ft2 al maximum head (vertical distance from the bottom of the penstock, at the to the water level):ft
		(5) (6)	Is the	water supply run-of-the-river or reservoir:ft3/sec
		(7)	Avera	ge energy rate:kW-hrs/acre-ft
		(8)	Estima	ated yearly energy production:kW-hrs
	C.	Comp	lete this	section for each machine, independent of the turbine type.
		(1)	Turbin	ne manufacturer:
		(2) (3)	Minim	num turbine power output:MW um turbine power output (while on line):MW
		(4)	Gover	nor information:
			(a) (b)	Droop setting (speed regulation): Is the governor mechanical-hydraulic or electro-hydraulic (Electro-hydraulic governors have an electronic speed sensor and transducer.)?
			(c)	Other comments regarding the turbine governor system?
				·
7.	Indu	ction Ge	nerator	Data:
	A.	Rated	Genera	tor Power Factor at rated load:
	B. C.			ertia (including prime mover):eclose blocking? Yes, No
	U.	Note:	Sufficie	nt capacitance may be on the line now, or in the future, and the generator e unexpectedly.

8. Generator Short Circuit Data

	For each generator model, provide the following reactances expressed in p.u. on the generator base:
	 X"1 – positive sequence subtransient reactance:p.u** X2 – negative sequence reactance:p.u** X0 – zero sequence reactance:
	Generator Grounding (select 1 for each model):
	A Solidly grounded B Grounded through an impedance (Impedance value in p.u on generator base. R:p.u. X: p.u.) C Ungrounded
9.	Step-Up Transformer Data
	For each step-up transformer, fill out the data form provided in Table 1.
10.	Interconnection Facilities 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:
Line Le Line ter Conduct If bundl Phase (Phase 3 Distance Ground Attach Summe Positive Zero Se Zero Se Line Ch	al Voltage:kV ngth:miles mination Points: ctor Type: Size: ed. Number per phase:, Bundle spacing:in. Configuration. Vertical:, Horizontal: Spacing: A-B:ft., B-C:ft., C-A:ft. ee of lowest conductor to Ground at full load and 40 C:oft Wire Type: Size: Distance to Ground:ft Tower Configuration Diagram er line ratings in amperes (normal and emergency) es Sequence Resistance (R): p.u.** (for entire line length) ex Sequence Reactance: (X): p.u** (for entire line length) equence Reactance: (X 0): p.u.** (for entire line length) equence Reactance: (X 0): p.u.** (for entire line length) enarging (B/2): p.u** 00-MVA and nominal line voltage (kV) Base For Wind/photovoltaic plants, provide collector System Equivalence Impedance Data
iva.	Provide values for each equivalence collector circuit at all voltage levels.
Summe Positive Positive Zero Se Zero Se Line Ch	al Voltage:

11. Wind Generators

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.

12. Load Flow and Dynamic Models:

Provide load flow model for the generating plant and its interconnection facilities in GE PSLF *.epc format, including new buses, generators, transformers, interconnection facilities. An equivalent model is required for the plant with generation collector systems. This data should reflect the technical data provided in this Attachment A.

For each generator, governor, exciter and power system stabilizer, select the appropriate dynamic model from the General Electric PSLF Program Manual and provide the required input data. The manual is available on the GE website at www.gepower.com. Select the following links within the website: 1) Our Businesses, 2) GE Power Systems, 3) Energy Consulting, 4) GE PSLF Software, 5) GE PSLF User's Manual. Include any user written *.p EPCL files to simulate inverter based plants' dynamic responses (typically needed for inverter based PV/wind plants). Provide a completed *.dyd file that contains the information specified in this section.

There are links within the GE PSLF User's Manual to detailed descriptions of specific models, a definition of each parameter, a list of the output channels, explanatory notes, and a control system block diagram. The block diagrams are also available on the CAISO Website.

If you require assistance in developing the models, we suggest you contact General Electric. Accurate models are important to obtain accurate study results. Costs associated with any changes in facility

requirements that are due to differences between model data provided by the generation developer and the actual generator test data, may be the responsibility of the generation developer.

TABLE 1

TRANSFORMER DATA (Provide for each level of transformation)

UNIT		
NUMBER OF TRANSFORMERS_	PHASE	

RATING	H Winding	X Winding	Y Winding
Rated MVA			
Connection (Delta, Wye, Gnd.)	·		
Cooling Type (OA,OA/FA, etc):			
Temperature Rise Rating			
Rated Voltage			
BIL			
Available Taps (% of rating)			
Load Tap Changer? (Y or N)			
Tap Settings			
IMPEDANCE	H-X	H-Y	X-Y
Percent			
MVA Base			- <u></u> -
Tested Taps			
WINDING RESISTANCE	Н	Х	Y
Ohms	·		-
CURRENT TRANSFORMER RATIOS			
H X	Y	N	
Percent exciting current	at 100 % Voltage:	110% Volt:	ane

Percent exciting current at 100 % Voltage; _____ 110% Voltage____ Supply copy of nameplate and manufacture's test report when available

Appendix 2 LGIP Relating To The Transition Cluster Large Generator Interconnection Procedures (LGIP) Relating to the Transition Cluster

Section 1. Objective, Applicability and Definitions

1.1 Objective and Applicability

The objective of this Appendix 2 to the Large Generator Interconnection Procedures (LGIP) is to implement the requirements for interconnecting to the CAISO Controlled Grid those Generating Facilities assigned to the Transition Cluster. All Interconnection Requests assigned to the Transition Cluster shall be deemed to have been assigned to a Queue Cluster Window for purposes of LGIP Section 1.1 and therefore all provisions of the LGIP apply to Generating Facilities included in the Transition Cluster, except as set forth herein.

1.2 Definitions

1.2.1 Master Definitions Supplement and Other General Definition Rules

Unless the context otherwise requires, any word or expression defined in the Master Definitions Supplement, Appendix A to the CAISO Tariff, shall have the same meaning where used in this Appendix 2 to the LGIP. Further, unless the context otherwise requires, any word or expression defined in LGIP Section 1.2 shall have the same meaning where used in this Appendix 2 to the LGIP. References to LGIP in this Appendix 2 are to Appendix Y of the CAISO Tariff.

1.2.2 Special Definitions for this LGIP Appendix 2

In this Appendix 2 to the LGIP, the following words and expressions shall have the meanings set opposite them:

"Serial Study Group" shall mean the collection of valid Interconnection Requests with an assigned Queue Position on or before June 1, 2008 studied in accordance with the interconnection procedures set forth in the version of the LGIP set forth in CAISO Tariff Appendix U as permitted by the decision of FERC in Docket No. ER08-960-000.

"Transition Cluster" shall mean the collection of valid Interconnection Requests with an assigned Queue Position on or before June 1, 2008 that were not included as part of the Serial Study Group by the decision of FERC in Docket No. ER08-960-000.

"Transition Cluster Interconnection Study Deposit" shall mean, for each Interconnection Request in the Transition Cluster other than those subject to Section 3.2 of this Appendix 2 to the LGIP, the difference between (i) \$250,000 and (ii) the total amount the Interconnection Customer has been charged for Interconnection Studies performed under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement plus the balance of any remaining deposit provided under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement. For an Interconnection Request subject to Section 3.2 of this Appendix 2 to the LGIP, the amount of the Transition Cluster Interconnection Study Deposit shall be the difference between (i) \$100,000 and (ii) the total amount the Interconnection Customer has been charged for Interconnection Studies performed under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement, 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, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement.

2. Queue Position

The Queue Position of any Interconnection Request included in the Transition Cluster shall be deemed to be lower than that of any Interconnection Request included in the Serial Study Group for purposes of performing Interconnection Studies for Large Generating Facilities whose Interconnection Requests are in the Serial Study Group.

3. Requirements to Remain in the Transition Cluster

3.1 General Requirements for Large Generating Facilities

An Interconnection Request deemed to be included in the Transition Cluster in accordance with the decision of FERC in Docket No. ER08-960-000 will be deemed to have been withdrawn from the Transition Cluster unless the Interconnection Customer provides, within sixty (60) calendar days from the effective date of this Appendix 2 to the LGIP, all of the following: (i) a Transition Cluster Interconnection Study Deposit, (ii) a statement of the requested deliverability status, (iii) a preferred Point of Interconnection and voltage level and all other technical data required by the LGIP, if not already submitted to the CAISO, and (iv) demonstration of Site Exclusivity or a posting of a Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity must be, at a minimum, through the anticipated Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility.

Section 3.8 of the LGIP shall not apply to a failure to satisfy the requirements of this Section 3.1 of this Appendix 2 to the LGIP.

3.2 Special Requirements for Certain Small and Existing Large Generating Facilities

An Interconnection Customer with an Interconnection Request in the Transition Cluster relating to (a) a Small Generating Facility seeking a Deliverability Assessment or (b) a Generating Facility, subject to the LGIP in accordance with CAISO Tariff Section 25.1.1, that has achieved Commercial Operation prior to the date of the Interconnection Request, and is seeking to increase the capacity of the Generating Facility by less than 20 MW, will be deemed to have withdrawn its Interconnection Request from the Transition Cluster unless it provides, within sixty (60) calendar days from the effective date of this Appendix 2 to the LGIP, all of the following: (i) a Transition Cluster Interconnection Study Deposit, (ii) a statement of the requested deliverability status, (iii) a preferred Point of Interconnection and voltage level and all other technical data required by the LGIP, if not already submitted to the CAISO, and (iv) demonstration of Site Exclusivity or a posting of a Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity, at a minimum, must be through the Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility.

Section 3.8 of the LGIP shall not apply to a failure to satisfy the requirements of this Section 3.2 of this Appendix 2 to the LGIP.

3.3 Communication of Transition Cluster Interconnection Study Deposit Amount

The CAISO shall provide each Interconnection Customer with the amount of its Transition Cluster Interconnection Study Deposit within five (5) Business Days after the effective date of this Appendix 2 to the LGIP.

3.4 Use of the Transition Cluster Interconnection Study Deposit

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

as applicable, to perform and administer the Interconnection Studies. The Transition Cluster Interconnection Study Deposit is not refundable.

Upon execution of a GIA by an Interconnection Customer, the CAISO and the applicable Participating TO(s), or the approval by FERC of an unexecuted GIA, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Transition Cluster Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceed the costs the CAISO, Participating TOs, or third parties have incurred on the Interconnection Customer's behalf.

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

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

3.5 Obligation for Study Costs

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

4. Phase I Interconnection Study

4.1 Grouping Interconnection Requests and Base Cases

Interconnection Requests in the Transition Cluster shall be grouped in accordance with LGIP Section 6.1. Rather than Generation submitted during a Queue Cluster Window, the Interconnection Base Case Data for the Transition Cluster shall reflect the Generation from those Interconnection Requests that satisfy the requirements of Sections 3.1 and 3.2 of this Appendix 2 to the LGIP.

4.2 Schedule

The Phase I Interconnection Study, as described in LGIP Section 6, including the grouping and Interconnection Base Case Data development, for the Transition Cluster shall commence no later than December 1, 2008 or sixty (60) calendar days after the effective date of this Appendix 2 to the LGIP, whichever is later. Results of the Phase I Interconnection Study shall be provided to

the Interconnection Customer within two hundred forty (240) calendar days after commencement under this Section.

4.3 Results Meeting

Within sixty (60) calendar days after providing the Phase I Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s), the CAISO and the Interconnection Customer shall meet to discuss the results of the Phase I Interconnection Study, including assigned cost responsibility.

4.3.1 Modifications

Proposed modifications to the Interconnection Request shall be evaluated as set forth in LGIP Section 6.7.2, except that for projects in the Transition Cluster (i) the modifications permitted under this Section shall also include: (d) an increase in the MW value above the Generating Facility Capacity set forth in the Interconnection Request, not to exceed thirty percent (30%) of the original amount (i.e. not to exceed 130% of the Generation Facility Capacity set forth in the original Interconnection Request); and (e) a change in the requested deliverability status set forth in the Interconnection Request from Energy Only to full capacity, and (ii) any modifications requested for projects in the Transition Cluster must be made within five (5) business days of the effective date of this tariff sheet.

To the extent that modifications made by one or more Interconnection Customers for either of the reasons specified in this Section 4.3.1 causes the need for additional upgrades within the applicable Transition Cluster study group beyond those identified in the Phase I Interconnection Study, the responsibility for financing such incremental upgrades shall be assigned solely to those Interconnection Customers making such modifications, pro rata in accordance with applicable provisions of the LIGP and this Appendix 2.

4.4 Cost Allocation Methods for Reliability Network Upgrades in Phase I Interconnection Study

The estimated costs for Reliability Network Upgrades identified in the Phase I Interconnection Study for the Transition Cluster shall be allocated as set forth in LGIP Section 6.3.1, except that the estimated costs of short circuit related Reliability Network Upgrades identified through the Phase I Interconnection Study shall be assigned to all Interconnection Requests in that 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.

5. Phase II Interconnection Study

5.1 Phase II Interconnection Study Procedures

The Phase II Interconnection Study, as described in LGIP Section 7, for the Transition Cluster shall commence no later than one hundred twenty (120) calendar days after publication of the Phase I Interconnection Study report. Results of the Phase II Interconnection Study shall be provided to the Interconnection Customer within three hundred thirty (330) calendar days after commencement under this Section.

5.2 Coordination of the Phase II Interconnection Study with the Transmission Planning Process

As part of the Uniform Planning Assumptions and Study Plan developed under Section 24 of the CAISO Tariff during calendar year 2009, the CAISO shall include technical analyses intended to

identify, at a minimum, conceptual transmission upgrades that may access proposed Large Generating Facilities included in the Transition Cluster that are located in Energy Resource Areas.

5.3 Financing of Reliability Network Upgrades Identified in Phase II Interconnection Study

The responsibility for financing final Reliability Network Upgrades identified in the Phase II Interconnection Study for the Transition Cluster shall be determined as set forth in LGIP Section 7.3, except that the responsibility for financing final short circuit related Reliability Network Upgrades identified in the Phase II Interconnection Study shall be assigned to all Interconnection Requests in that 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 and Section 4.4 of this Appendix 2.

6. Interconnection Financial Security

The provisions of LGIP Section 9 shall apply to the Transition Cluster, except that (i) the initial posting of Interconnection Financial Security under LGIP Section 9.2 in Appendix Y shall be required on or before the later of ten (10) business days after the effective date of this tariff sheet or one hundred twenty (120) calendar days after publication of the Phase I Interconnection Study report, but in no event earlier than November 30, 2009 or later than December 18, 2009; and (ii) any Interconnection Customer who has been permitted a modification for either of the reasons specified in Section 4.3.1 of this Appendix 2 shall make its first posting of Interconnection Financial Security for Network Upgrades pursuant to LGIP Section 9.2 in an amount equal to the lesser of \$20,000 per megawatt of electrical output of the Large Generating Facility, including any modifications thereto, or \$7,500,000, but in no event less than \$500,000, and shall make its second and third postings of Interconnection Financial Security for Network Upgrades pursuant to LGIP Section 9.3 based on the total cost responsibility assigned to the Interconnection Customer for Network Upgrades in the Phase II Interconnection Study.

Appendix 3

GENERATOR INTERCONNECTION STUDY PROCESS AGREEMENT FOR QUEUE CLUSTERS

THIS AGREEMENT is	made and entered into this	day of	, 20	by and between
, a	organized and existir	ng under th	ne laws of th	ne State of ,
("Interconnection Customer") a	and the California Independen	t System (Operator Co	orporation, a California
nonprofit public benefit corpora	ation existing under the laws of	of the State	e of Californ	ia, ("CAISO"). The
Interconnection Customer and	the CAISO each may be refe	rred to as	a "Party," o	r collectively as the
"Parties."	•		•	•

RECITALS

WHEREAS, the Interconnection Customer is proposing to develop a Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated ______; and

WHEREAS, the Interconnection Customer desires to interconnect the Generating Facility with the CAISO Controlled Grid pursuant to the Queue Cluster process; and

WHEREAS, the Interconnection Customer has requested the CAISO to conduct or cause to be performed Interconnection Studies to assess the system impact of interconnecting the Generating Facility to the CAISO Controlled Grid and to specify and estimate the cost of the equipment, engineering, procurement and construction work needed on the Participating TO's electric system in accordance with Good Utility Practice to physically and electrically connect the Generating Facility to the CAISO Controlled Grid:

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the CAISO's FERC-approved Generation Interconnection Procedures in CAISO Tariff Appendix Y ("GIP") 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 GIP 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.
- 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 6.9.2 of the GIP and modifications to the proposed Commercial Operation Date of the Generating Facility permitted by the GIP. 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 GIP.

- 5.0 The Interconnection Study report for each Interconnection Study shall provide the information specified in the GIP.
- 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 GIP.

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 Section 3.5.1 of the GIP.

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 GIP.

- 7.0 Pursuant to Section 3.7 of the GIP, the CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems. The CAISO may provide a copy of the Phase I Interconnection Study results to an Affected System Operator and the Western Electricity Coordinating Council. Requests for review and input from Affected System Operators or the Western Electricity Coordinating Council may arrive at any time prior to interconnection.
- 8.0 Substantial portions of technical data and assumptions used to perform the Phase I Interconnection Study, such as system conditions, existing and planned generation, and unit modeling, may change after the CAISO provides the Interconnection Study results to the Interconnection Customer. Interconnection Study results will reflect available data at the time the CAISO provides the Phase I Interconnection Study report to the Interconnection Customer. The CAISO shall not be responsible for any additional costs, including, without limitation, costs of new or additional facilities, system upgrades, or schedule changes, that may be incurred by the Interconnection Customer as a result of changes in such data and assumptions.

9.0 **[NOT USED]**

- 10.0 The CAISO shall maintain records and accounts of all costs incurred in performing the Interconnection Study in sufficient detail to allow verification of all costs incurred, including associated overheads. The Interconnection Customer shall have the right, upon reasonable notice, within a reasonable time at the CAISO's offices and at its own expense, to audit the CAISO's records as necessary and as appropriate in order to verify costs incurred by the CAISO. Any audit requested by the Interconnection Customer shall be completed, and written notice of any audit dispute provided to the CAISO representative, within one hundred eighty (180) calendar days following receipt by the Interconnection Customer of the CAISO's notification of the final costs of the Interconnection Study.
- 11.0 In accordance with Section 3.8 of the GIP, 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 GIP.
- 12.0 Pursuant to Section 6.1 of the GIP, 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 GIP, 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 GIP.

- 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 GIP.
- 13.2 Confidentiality. Confidential Information shall be treated in accordance with Section 13.1 of the GIP.
- 13.3 Binding Effect. This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 13.4 Conflicts. In the event of a conflict between the body of this Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.
- 13.5 Rules of Interpretation. This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article or Section of this Agreement or such Appendix to this Agreement, or such Section of the GIP or such Appendix to the GIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article. Section, or other provision hereof or thereof: (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".
- 13.6 Entire Agreement. This Agreement, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.
- 13.7 No Third Party Beneficiaries. This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.

13.8 Waiver. The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO or CAISO. Any waiver of this Agreement shall, if requested, be provided in writing.

Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.

- 13.9 Headings. The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.
- 13.10 Multiple Counterparts. This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 13.11 Amendment. The Parties may by mutual agreement amend this Agreement by a written instrument duly executed by both of the Parties.
- 13.12 Modification by the Parties. The Parties may by mutual agreement amend the Appendices to this Agreement by a written instrument duly executed by both of the Parties. Such amendment shall become effective and a part of this Agreement upon satisfaction of all applicable laws and regulations.
- 13.13 Reservation of Rights. The CAISO shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 13.14 No Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.
- 13.15 Assignment. This Agreement may be assigned by a Party only with the written consent of the other Party; provided that a Party may assign this Agreement without the consent

of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; and provided further that the Interconnection Customer shall have the right to assign this Agreement, without the consent of the other Party, for collateral security purposes to aid in providing financing for the 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]	
Ву:	
Printed Name:	
Title:	
Date:	

California Independent System Operator Corporation

Appendix A

Assumptions In Phase I Interconnection Study Generator Interconnection Study Process Agreement for Queue Clusters

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 6.9.2 of the GIP, and the following assumptions:

Designation of Point of Interconnection and configuration to be studied.

Deliverability status requested (full capacity or Energy only)

Appendix B

Data Form, Pre-Phase II Interconnection Study Generator Interconnection Study Process Agreement for Queue Clusters

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 GIP.
Provide location plan and one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.
One set of metering is required for each generation connection to the new bus or existing CAISO Controlled Grid station. Number of generation connections:
On the one line indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)
On the one line indicate the location of auxiliary power. (Minimum load on CT/PT)
Will an alternate source of auxiliary power be available during CT/PT maintenance? Yes No
Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? Yes No (Please indicate on one line).
What type of control system or PLC will be located at the Interconnection Customer's Generating Facility?
What protocol does the control system or PLC use?
Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.
Physical dimensions of the proposed interconnection station:
Bus length from generation to interconnection station:

Line length from interconnection station to the Participating TO's transmission line.
Tower number observed in the field. (Painted on tower leg)*
Number of third party easements required for transmission lines*:
* To be completed in coordination with the Participating TO or CAISO.
Is the Generating Facility in the Participating TO's service area?
Yes No
Local service provider for auxiliary and other power:
Please provide proposed schedule dates:
Environmental survey start:
Environmental impact report submittal:
Procurement of project equipment:
Begin Construction Date:
Generator step-up transformer Date: receives back feed power
Generation Testing Date:
Commercial Operation Date:
Level of Deliverability: Choose one of the following:
Energy Only
Full Capacity

Appendix 4

Agreement for Allocating GIP and Study Responsibilities AGREEMENT FOR THE ALLOCATION OF RESPONSIBILITIES WITH REGARD TO GENERATOR INTERCONNECTION PROCEDURES AND INTERCONNECTION STUDY AGREEMENTS

This Agreement for the Allocation of	Responsibilities With Regard to Generator	Interconnection
Procedures and Interconnection Study Agree	ements ("Agreement"), dated	, is
entered into between the California Independ	dent System Operator Corporation ("CAISC	") and [NAME OF
PTO]	_ ("PTO"). The CAISO and PTO are jointly	y referred to as the
"Parties" and individually, as a "Party."		

WHEREAS, this Agreement will ensure an independent assessment of new 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 Generator Interconnection Procedures set forth in CAISO Tariff Appendix Y ("GIP"), the CAISO and PTO agree to the following allocation of responsibilities for a centralized Interconnection Study process under the direction and oversight of the CAISO:

1. **DEFINITIONS**

Unless otherwise defined herein, all capitalized terms shall have the meaning set forth in the CAISO Tariff.

2. TERM OF AGREEMENT

This Agreement shall become effective upon the date specified in the first paragraph above and shall remain in effect until (1) terminated by all Parties in writing, or (2) with respect to the PTO, upon the termination of that entity's status as a PTO pursuant to the Transmission Control Agreement, as amended from time to time.

3. PROVISIONS FOR ALLOCATION OF RESPONSIBILITIES BETWEEN CAISO AND PTO

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 Generating Facilities are to be interconnected, and that the PTO may construct or modify facilities to allow the interconnection. While the Parties recognize that the CAISO will be responsible for conducting or causing to be performed Interconnection Studies and similar studies, the PTO will participate in these studies and conduct certain portions of studies, under the direction and oversight of, and approval by, the CAISO, as provided in this Agreement. The CAISO shall not enter into any Interconnection Study agreement with an Interconnection Customer that is contrary to these rights.

3.2 [INTENTIONALLY LEFT BLANK]

3.3 Transmission Owners' Right to Participation in Studies, Committees and Meetings:

- 3.3.1 In the event that an Interconnection Customer proposes to interconnect a 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 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 GIP. 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 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.
- 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 GIP Section 3.2.
- 3.7 Re-Studies: If any re-studies are required, the CAISO will confer with the PTO as to the need for a re-study. The CAISO will make the final determination regarding the need for a re-study, subject to dispute resolution procedures.
- 3.8 Use of Contractors: Nothing in this Agreement shall prevent either the CAISO or the PTO from using qualified, mutually agreed upon third party contractors to meet that Party's rights or obligations under this Agreement or the GIP. 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 GIP, this Agreement, and any FERC approved Interconnection Study procedures that may be adopted by the CAISO to implement the GIP 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 GIP, 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 GIP.
- **4.4** Binding Effect: This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 4.5 Conflicts: In the event of a conflict between the body of this Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.
- 4.6 Rules of Interpretation: This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section, Attachment, or Appendix means such Article or Section of this Agreement or such Attachment or Appendix to this Agreement, or such Section of the GIP or such Appendix to the GIP, as the case may be: (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article or Section; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".

- 4.7 Entire Agreement: This Agreement, including all Attachments hereto, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, among the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants, which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.
- 4.8 No Third Party Beneficiaries: This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.
- 4.9 Waiver: The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party. Any waiver at any time by a Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Any waiver of this Agreement shall, if requested, be provided in writing. Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- 4.10 Headings: The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.
- **4.11** Multiple Counterparts: This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 4.12 Modification by the Parties: The Parties may amend this Agreement and any Appendices to this Agreement only (1) by mutual agreement of the Parties by a written instrument duly executed by the Parties, subject to FERC approval or (2) upon the issuance of a FERC order, pursuant to Section 206 of the Federal Power Act. It is the Parties' intent that FERC's right to change any provision of this Agreement shall be limited to the maximum extent permissible by law and that any such change, if permissible, shall be in accordance with the Mobile-Sierra public interest standard applicable to fixed rate agreements. United Gas Pipe Line Co. v. Mobile Gas Service Corp., 350 U.S. 332 (1956). Such amendment shall become effective and a part of this Agreement upon satisfaction of all applicable laws and regulations. Notwithstanding the foregoing, Attachment B (Notices) may be modified as set forth in Section 4.15 of this Agreement, and the CAISO and the PTO may from time to time mutually agree to deviate from Attachment A in accordance with the provisions of this Agreement, however, such deviation shall be subject to Section 4.9 of this Agreement and not considered a course of dealing.
- 4.13 No Partnership: This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act

on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.

- 4.14 Assignment: This Agreement may be assigned by a Party only with the written consent of the other Parties; provided that a Party may assign this Agreement without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.
- 4.15 Notices: Any notice, demand, or request provided in this Agreement, or served, given, or made in connection with it, will be in writing and deemed properly served, given, or made if delivered in person, transmitted by facsimile, or sent by United States mail, postage prepaid, to the persons specified in Attachment B hereto unless otherwise provided in this Agreement. Any Party may at any time, by notice to all other Parties, change the designation or address of the person specified in Attachment B as the person who receives notices pursuant to this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement in multiple originals, each of which shall constitute and be an original effective agreement among the Parties.

California Independent System Operator Corporation

By:	
Printed Name:	
Title:	
Date:	
[NAME OF PTO]	
By:	
Printed Name:	
Title:	
Date:	

ATTACHMENT A

INTERCONNECTION STUDY RESPONSIBILITY ALLOCATION

Description of 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 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 GIA, GIP and Generator Interconnection Study Process Agreement for Queue Clusters.

Interconnection Request (IR) Process

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

Phase I Interconnection Study Timeline

Line	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 and short circuit mitigation).	1	1
2	PTOs develop draft Base Cases, each representing all Generating Facilities in the queue cluster, and deliver to CAISO.	15	2-16
3	PTO develops preferred and alternative, if applicable, direct interconnection plans, including the need for an Interconnection Grid Substation (IGS).	15	2-16
4	PTO develops draft contingency lists.	15	2-16
5	CAISO reviews and approves Base Cases and direct interconnection plans and merges them together, as needed. PTOs update off-peak Base Cases. CAISO reviews and approves contingency lists. PTO needs time to consider CAISO proposed changes.	5	17-21
6	CAISO provides Deliverability Assessment results identifying constrained facilities, using summer peak and off-peak Base Cases, and prepares results summary and may propose mitigation plans for PTO review.	15	22-36

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.	15	22-36
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	15	37-51
9	CAISO retests Deliverability Assessment results with proposed Delivery Network Upgrades. PTO reviews and comments on retest results.	5	52-56
10	CAISO develops shift factors for cost allocation purposes of all Network Upgrades associated with mitigating thermal overloads.	5	57-61
Short C	Circuit Duty		
11	CAISO coordinates with other potentially affected facility owners ¹ .	n/a	n/a
12	CAISO directs PTO to develop Base Case and run short circuit analysis.	10	57-66
13	PTO performs facilities review. (Note: possibly for feedback into the power flow studies and PTO mitigation plans.)	10	67-76
14	PTO prepares draft study results and submits to the CAISO for review and direction.	3	77-79
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.	78	22-99
Final R			
16	At the CAISO's direction, PTO(s) prepares draft report for impacts in its service territory.	83	22-104
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.	10	105-114
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.	10	115-124
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 St	tudy Report		ı
20	CAISO provides final approved report to ICs, PTO, and any applicable Affected Systems.	10	125-134

[footnote 1: In accordance with the WECC Short Circuit Duty Procedure]

**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)
	PTOs update Base Cases from Phase I		
21	Interconnection Study line 5 to remove projects that	10	1-10
	have withdrawn.		
22	CAISO reviews and approves Base Cases.	5	11-15
23	CAISO and PTOs update studies performed in Phase I lines 6-14 using Base Cases from line 22. Additional alternatives may be considered to 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.	75	16-90
23.1	Large Network Upgrades will be further evaluated within the Phase 2 transmission study process as set forth in Appendix 24 of the CAISO Tariff. The large Network Upgrades either (a) consist of new transmission lines requiring new rights of way, are 200 kV or above, and have capital costs of \$50 million or greater, or (b) are 500 kV substation facilities that have capital costs of \$50 million or greater.		
24	PTOs develop draft off-peak and summer peak operating year Base Cases as appropriate where each case includes all Generating Facilities in Phase II Interconnection Study having the same operating date and deliver to CAISO.	30	61-90
25	CAISO reviews and approves cases from line 24.		
26	At the CAISO's direction, the PTOs perform operational studies using cases from line 25 to determine Network Upgrade requirements for each study year and identify any special operational requirements to connect projects in the year of study.	30	91-120
27	At the CAISO's direction, the PTOs perform additional operational studies to identify the optimal approach for building out the overall plan of service on a segmented (i.e. building block) basis acknowledging that portions of the overall plan of service may be staged in segments over time. Ian of Service Report Including Facility Costs and Sch	10	121-130
rinai P	· · · · · · · · · · · · · · · · · · ·	ledules	
28	At the CAISO's direction, PTO(s) prepares draft plan of service report. At the CAISO's direction, PTO(s) to prepare detailed cost estimates and schedules for the direct assignment facilities and Network Upgrades identified in the overall plan of service and including individual segments.	75	91-165
29	CAISO reviews draft plan of service report and submits comments, recommendations and direction to the PTO.	10	166-175
30	PTO incorporates CAISO directions, conclusions and recommendations. If CAISO conclusions and recommendations conflict with PTO conclusions, then	21	176-196

PTO submits final draft report to the CAISO. The CAISO will finalize the report.		CAISO and PTO must coordinate to resolve conflicts. Any remaining conflicts must be noted in the final	
CAISO will finalize the report.	24	report. PTO submits final draft report to the CAISO. The	_
	31	CAISO will finalize the report.	

ATTACHMENT B

CONTACTS FOR NOTICES

[Section 4.15]

California ISO

Manager, Transmission Engineering Blue Ravine Road Folsom, CA 95630 Phone: 916.351.2104 Fax: 916.351.2264

[NAME OF PTO]

[Address of PTO]

Appendix 5 Schedule for Release and Review of Per Unit Costs

SCHEDULE FOR RELEASE AND REVIEW OF PER UNIT COSTS

	Schedule for the Release and Review of Per Unit Anticipated						
Line	Costs	Calendar Date(s)					
3.	00313	Calcinaal Date(3)					
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
12.							
	Annual Review, Update, and Posting of Per Unit						
	Costs						
13.	PTOs to review and update their per unit costs.	October - mid-January					
	PTOs to provide their updated per unit costs to the	, and the second					
14.	CAISO for CAISO review and posting to the CAISO	Mid-January					
	Website.	j					
15.	CAISO to review and post the PTO per unit costs to	Third wools of January					
15.	the CAISO Website for stakeholder review.	Third week of January					
16.	Provide two weeks for stakeholders to review the	Last week of January and					
10.	posted per unit costs.	first week of February					
	CAISO to schedule and conduct a one-day						
17.	stakeholder meeting in February to discuss the	Second week of February					
	posted per unit costs with stakeholders.						
	Provide two weeks following the scheduled	Last two weeks of					
18.	stakeholder meeting for stakeholders to provide	February					
10.	comments to the CAISO.	1 Cordary					
19.	Provide two weeks for CAISO and PTOs to review	First two weeks of March					
10.	and address stakeholder comments.	That two wooks of march					
20.	Provide three weeks following the stakeholder						
	meeting for PTOs to review, update as needed, and	First three weeks of March					
	finalize their per unit costs.						
21.	PTOs to provide their final per unit costs to the	End of third week of March					
	CAISO for posting to the CAISO Website.	Ziid di ama waak di maran					
22.	CAISO to review and post the PTOs' final per unit	Fourth week of March					
	costs to the CAISO Website.	. carar resident materi					
23.	Final per unit costs are posted and available for use	Last week of March to first					
	to estimate the costs of Network Upgrades and	of April					
	Interconnection Facilities.	от дріїі					

Appendix 6

GENERATOR INTERCONNECTION STUDY PROCESS AGREEMENT FOR INDEPENDENT STUDY PROCESS

	THIS AGREEMENT	s made and entered into this	day of	, 20	by and between
	, a	organized and existir	ng under th	ne laws of th	ne State of ,
("Interd	connection Customer")	and the California Independen	t System (Operator Co	orporation, a California
nonpro	fit public benefit corpo	ration existing under the laws o	of the State	of Californ	ia, ("CAISO"). The
Interco	nnection Customer an	d the CAISO each may be refe	rred to as	a "Party," o	r collectively as the
"Partie	s."	·		•	•

RECITALS

WHEREAS, the Interconnection Customer is proposing to develop a Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated ______; and

WHEREAS, the Interconnection Customer desires to interconnect the Generating Facility with the CAISO Controlled Grid pursuant to the Independent Study Process; and

WHEREAS, the Interconnection Customer has requested the CAISO to conduct or cause to be performed Interconnection Studies to assess the system impact of interconnecting the Generating Facility to the CAISO Controlled Grid and to specify and estimate the cost of the equipment, engineering, procurement and construction work needed on the Participating TO's electric system in accordance with Good Utility Practice to physically and electrically connect the Generating Facility to the CAISO Controlled Grid:

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the CAISO's FERC-approved Generation Interconnection Procedures in CAISO Tariff Appendix Y ("GIP") 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 consistent with the GIP in accordance with the CAISO Tariff.
- 3.0 The scope of the applicable Interconnection Studies shall be subject to the assumptions set forth in Appendices A and B to this Agreement.
- 4.0 The Interconnection Studies will be based upon the technical information provided by the Interconnection Customer in the Interconnection Request, as may be modified as the result of the Scoping Meeting, subject to any modifications in accordance with Section 6.9.2 of the GIP and modifications to the proposed Commercial Operation Date of the Generating Facility permitted by the GIP. 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 GIP.
- 5.0 The Interconnection Study report for each Interconnection Study shall provide the information specified in the GIP.

The Interconnection Customer shall provide an Interconnection Study Deposit 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 GIP.

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 Section 3.5.1 of the GIP.

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 GIP.

- 7.0 Pursuant to Section 3.7 of the GIP, 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 System Impact 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 System Impact 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 System Impact Study report to the Interconnection Customer. The CAISO shall not be responsible for any additional costs, including, without limitation, costs of new or additional facilities, system upgrades, or schedule changes, that may be incurred by the Interconnection Customer as a result of changes in such data and assumptions.
- 9.0 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.
- 10.0 In accordance with Section 3.8 of the GIP, 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 Sections 3.5.1 and 13.1 of the GIP.
- 11.0 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 GIP, 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 GIP.
- 12.0 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 GIP.
- 12.2 Confidentiality. Confidential Information shall be treated in accordance with Section 13.1 of the GIP.
- 12.3 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.
- 12.4 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.
- 12.5 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 GIP or such Appendix to the GIP, 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".
- 12.6 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.
- 12.7 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.
- 12.8 Waiver. The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this

Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO or CAISO. Any waiver of this Agreement shall, if requested, be provided in writing.

Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.

- 12.9 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.
- 12.10 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.
- 12.11 Amendment. The Parties may by mutual agreement amend this Agreement by a written instrument duly executed by both of the Parties.
- 12.12 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.
- 12.13 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.
- 12.14 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.
- 12.15 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 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.

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

California Independent System Operator Corporation

Appendix A

Generator Interconnection Study Process Agreement for Independent Study Process

ASSUMPTIONS USED IN CONDUCTING THE SYSTEM IMPACT STUDY

The System Impact 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 6.9.2 of the GIP, and the following assumptions:

Designation of Point of Interconnection and configuration to be studied.

Deliverability Status requested (Full Capacity or Energy-Only)

Appendix B Data Form, Pre-Facilities Study Generator Interconnection Study Process Agreement for Independent Study Process

DATA FORM TO BE PROVIDED BY THE INTERCONNECTION CUSTOMER PRIOR TO COMMENCEMENT OF THE FACILITIES STUDY

Generating Facility size (MW):
Provide two copies of this completed form and other required plans and diagrams in accordance with Section 4.5 of the GIP.
Provide location plan and one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.
One set of metering is required for each generation connection to the new bus or existing CAISO Controlled Grid station. Number of generation connections:
On the one line indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)
On the one line indicate the location of auxiliary power. (Minimum load on CT/PT)
Will an alternate source of auxiliary power be available during CT/PT maintenance? Yes No
Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? Yes No (Please indicate on one line).
What type of control system or PLC will be located at the Interconnection Customer's Generating Facility?
What protocol does the control system or PLC use?
Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.
Physical dimensions of the proposed interconnection station:
Bus length from generation to interconnection station:
Line length from interconnection station to the Participating TO's transmission line.

Tower number observed in the field. (Painted on tower leg)*
Number of third party easements required for transmission lines*:
* To be completed in coordination with the Participating TO or CAISO.
Is the Generating Facility in the Participating TO's service area?
Yes No
Local service provider for auxiliary and other power:
Please provide proposed schedule dates:
Environmental survey start:
Environmental impact report submittal:
Procurement of project equipment:
Begin Construction Date:
Generator step-up transformer Date: receives back feed power
Generation Testing Date:
Commercial Operation Date:
Level of Deliverability Status: Choose one of the following:
Energy-Only
Full Capacity

Appendix 7

Application, Procedures & Terms for 10kW Interverter Process

Application, Procedures, and Terms and Conditions for Interconnecting a Certified Inverter-Based Small Generating Facility No Larger than 10 kW ("10 kW Inverter Process")

- 1.0 The Interconnection Customer ("Customer") completes the Interconnection Request ("Application") and submits it to the Participating TO ("Company").
- 2.0 The Company acknowledges to the Customer receipt of the Application within three Business Days of receipt.
- 3.0 The Company evaluates the Application for completeness and notifies the Customer within ten Business Days of receipt that the Application is or is not complete and, if not, advises what material is missing.
- 4.0 The Company verifies that the Small Generating Facility can be interconnected safely and reliably using the screens contained in the Fast Track Process in the Generator Interconnection Procedures (GIP). The Company has 15 Business Days to complete this process. Unless the Company determines and demonstrates that the Small Generating Facility cannot be interconnected safely and reliably, the Company approves the Application and returns it to the Customer. Note to Customer: Please check with the Company before submitting the Application if disconnection equipment is required.
- 5.0 After installation, the Customer returns the Certificate of Completion to the Company. Prior to parallel operation, the Company may inspect the Small Generating Facility for compliance with standards which may include a witness test, and may schedule appropriate metering replacement, if necessary.
- 6.0 The Company notifies the Customer in writing that interconnection of the Small Generating Facility is authorized. If the witness test is not satisfactory, the Company has the right to disconnect the Small Generating Facility. The Customer has no right to operate in parallel until a witness test has been performed, or previously waived on the Application. The Company is obligated to complete this witness test within ten Business Days of the receipt of the Certificate of Completion. If the Company does not inspect within ten Business Days or by mutual agreement of the Parties, the witness test is deemed waived.
- 7.0 Contact Information The Customer must provide the contact information for the legal applicant (i.e., the Interconnection Customer). If another entity is responsible for interfacing with the Company, that contact information must be provided on the Application.
- 8.0 Ownership Information Enter the legal names of the owner(s) of the Small Generating Facility. Include the percentage ownership (if any) by any utility or public utility holding company, or by any entity owned by either.
- 9.0 UL1741 Listed This standard ("Inverters, Converters, and Controllers for Use in Independent Power Systems") addresses the electrical interconnection design of various forms of generating equipment. Many manufacturers submit their equipment to a Nationally Recognized Testing Laboratory (NRTL) that verifies compliance with UL1741. This "listing" is then marked on the equipment and supporting documentation.

Application for Interconnecting a Certified Inverter-Based Small Generating Facility No Larger than 10kW

This Application is considered complete when it provides all applicable and correct information required below. Additional information to evaluate the Application may be required.

Processing Fee

A non-refundable processing fee of \$100 must accompany this Application.

Interconnection Customer				
Name:				
Contact Person:				
Address:				
City:	State:		Zip	
Telephone (Day):	(Eveni	ng):		
Fax:	E-Mail A	(Evening): E-Mail Address:		
Contact (if different from Intercon Name:				
Address:	01-1-			7'-
City:	State:			LIP:
Telephone (Day):Fax:	(Evening):		
rax:	E-IVI	ali Address:		
Small Generating Facility Informa Location (if different from above): Electric Service Company: Account Number:				
Inverter Manufacturer:		Model		
Inverter Manufacturer:Nameplate Rating:Three System Design Capacity:	(kW)	(kVA)		(AC Volts)
Single Phase Three	Phase			,
System Design Capacity:	(kW)		_ (kVA)	
Prime Mover: Photovoltaic Rec Turbine Other	ciprocating Engine	Fuel Cell		
Energy Source: Solar Wind Hyd	dro Diesel Natura	al Gas		
Fuel Oil Other (class the equipment UL1741 Listed?	Yes		No	
If Yes, attach manufacturer's cut-				
,	3 -	3		
Estimated Installation Date:		_Estimated	In-Service	e Date:

The 10 kW Inverter Process is available only for inverter-based Small Generating Facilities no larger than 10 kW that meet the codes, standards, and certification requirements of Appendices 9 and 10 of the Generator Interconnection Procedures (GIP), or the Participating TO has reviewed the design or tested the proposed Small Generating Facility and is satisfied that it is safe to operate.

List components of the Small Generating Facility equipment package that are currently certified:

	Equipment Type Certifying Entity
6	
7	
10	
Interconnectio	n Customer Signature
I hereby certify	that, to the best of my knowledge, the information provided in this Application is true. I
	by the Terms and Conditions for Interconnecting an Inverter-Based Small Generating ger than 10kW and return the Certificate of Completion when the Small Generating Facility
has been insta	
Signed:	
Titlo·	Date:
Tido	Date
O = = 1' = = = = 1	and all to let and a contribute Occasion Occasion Francisco
Contingent Ap	proval to Interconnect the Small Generating Facility
(For Company	use only)
	n of the Small Generating Facility is approved contingent upon the Terms and Conditions cting an Inverter-Based Small Generating Facility No Larger than 10kW and return of the Completion.
Company Sigr	nature:
Titlo	Data
Title	Date:
Application ID	number:
Company wait	ves inspection/witness test? Yes No
	Small Generating Facility Certificate of Completion
Is the Small G	enerating Facility owner-installed? Yes No
Interconnectio	n Customer:
Contact Perso	n:
Address:	
Location of the	e Small Generating Facility (if different from above):

City:	State:	Zip Code:
Telephone (Day):	(Evening): _	
Fax:	E-Mail Addres	ss:
<u>Electrician:</u>		
Name:		
Address:		
City:	State: _	Zip Code:
Telephone (Day):	(Evening):
Fax:	E-Mail Ad	ldress:
License number:		
Date Approval to Install Fa	acility granted by the Company:	
Inspection:		
The Small Generating Fac	ility has been installed and inspected	in compliance with the local
building/electrical code of		
Signed (Local electrical wi	ring inspector, or attach signed electr	ical inspection):
Print Name:		
	nection, you are required to send/fax a (insert Company information below):	a copy of this form along with a copy o
Name:		
Company:		
Address:		
City	State	ZIP:

Fax:	
Energizing the Small Generating Fac	erating Facility (For Company use only) cility is approved contingent upon the Terms and Conditions for small Generating Facility No Larger than 10kW
Company Signature:	
Title:	Date [.]

Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW

1.0 Construction of the Facility

The Interconnection Customer (the "Customer") may proceed to construct (including operational testing not to exceed two hours) the Small Generating Facility when the Participating TO (the "Company") approves the Interconnection Request (the "Application") and returns it to the Customer.

2.0 Interconnection and Operation

The Customer may operate Small Generating Facility and interconnect with the Company's electric system once all of the following have occurred:

- 2.1 Upon completing construction, the Customer will cause the Small Generating Facility to be inspected or otherwise certified by the appropriate local electrical wiring inspector with jurisdiction, and
- 2.2 The Customer returns the Certificate of Completion to the Company, and
- 2.3 The Company has either:
 - 2.3.1 Completed its inspection of the Small Generating Facility to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with applicable codes. All inspections must be conducted by the Company, at its own expense, within ten Business Days after receipt of the Certificate of Completion and shall take place at a time agreeable to the Parties. The Company shall provide a written statement that the Small Generating Facility has passed inspection or shall notify the Customer of what steps it must take to pass inspection as soon as practicable after the inspection takes place; or
 - 2.3.2 If the Company does not schedule an inspection of the Small Generating Facility within ten business days after receiving the Certificate of Completion, the witness test is deemed waived (unless the Parties agree otherwise); or
 - 2.3.3 The Company waives the right to inspect the Small Generating Facility.

- 2.4 The Company has the right to disconnect the Small Generating Facility in the event of improper installation or failure to return the Certificate of Completion.
- 2.5 Revenue quality metering equipment must be installed and tested in accordance with applicable ANSI standards.

3.0 Safe Operations and Maintenance

The Customer shall be fully responsible to operate, maintain, and repair the Small Generating Facility as required to ensure that it complies at all times with the interconnection standards to which it has been certified.

4.0 Access

The Company shall have access to the disconnect switch (if the disconnect switch is required) and metering equipment of the Small Generating Facility at all times. The Company shall provide reasonable notice to the Customer when possible prior to using its right of access.

5.0 Disconnection

The Company may temporarily disconnect the Small Generating Facility upon the following conditions:

- 5.1 For scheduled outages upon reasonable notice.
- 5.2 For unscheduled outages or emergency conditions.
- 5.3 If the Small Generating Facility does not operate in the manner consistent with these Terms and Conditions.
- 5.4 The Company shall inform the Customer in advance of any scheduled disconnection, or as is reasonable after an unscheduled disconnection.

6.0 Indemnification

The Parties shall at all times indemnify, defend, and save the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or inactions of its obligations under this agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

7.0 Insurance

The Parties each agree to maintain commercially reasonable amounts of insurance.

8.0 Limitation of Liability

Each party's liability to the other party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either party be liable to the other party for any indirect, incidental, special,

consequential, or punitive damages of any kind whatsoever, except as allowed under paragraph 6.0.

9.0 Termination

The agreement to operate in parallel may be terminated under the following conditions:

9.1 By the Customer

By providing written notice to the Company.

9.2 By the Company

If the Small Generating Facility fails to operate for any consecutive 12-month period or the Customer fails to remedy a violation of these Terms and Conditions.

9.3 Permanent Disconnection

In the event this Agreement is terminated, the Company shall have the right to disconnect its facilities or direct the Customer to disconnect its Small Generating Facility.

9.4 Survival Rights

This Agreement shall continue in effect after termination to the extent necessary to allow or require either Party to fulfill rights or obligations that arose under the Agreement.

10.0 Assignment/Transfer of Ownership of the Facility

This Agreement shall survive the transfer of ownership of the Small Generating Facility to a new owner when the new owner agrees in writing to comply with the terms of this Agreement and so notifies the Company.

Appendix 8

Transition of Existing SGIP Interconnection Requests to the GIP

Generator Interconnection Procedures (GIP) Relating to the SGIP Serial Study Group and SGIP Transition Cluster

Section 1. Objective, Applicability and Definitions

1.1 Objective and Applicability

The objective of this Appendix 8 to the Generator Interconnection Procedures (GIP) is to implement the requirements for interconnecting to the CAISO Controlled Grid those Generating Facilities assigned to the SGIP Serial Study Group or SGIP Transition Cluster.

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 8 to the GIP. Further, unless the context otherwise requires, any word or expression defined in GIP Section 1.2 shall have the same meaning where used in this Appendix 8 to the GIP. References to the GIP in this Appendix 8 are to Appendix Y of the CAISO Tariff.

1.2.2 Special Definitions for this GIP Appendix 8

In this Appendix 8 to the GIP, the following words and expressions shall have the meanings set opposite them:

"SGIP Serial Study Group" shall mean those Interconnection Customers with valid Interconnection Requests submitted pursuant to Appendix S of the CAISO Tariff prior to December 18, 2010 and who have executed System Impact Study or Facilities Study Agreements that provide for the completion of such studies by December 18, 2010.

"SGIP Transition Cluster" shall mean those Interconnection Customers with valid Interconnection Requests submitted pursuant to Appendix S of the CAISO Tariff prior to December 18, 2010 and which have not executed System Impact Study or Facilities Study Agreements that provide for the completion of such studies by December 18, 2010.

2. Transition of Projects in SGIP Serial Study Group

- An Interconnection Request deemed to be included in the SGIP Serial Study Group that wishes to be studied as an Energy-Only Deliverability Status Generating Facility shall not be required to conform to the provisions of Appendix Y of the CAISO Tariff. Rather, such Interconnection Requests will continue to be processed per the procedures set forth in Appendix S to the CAISO Tariff, unless they specifically indicate, in writing, within five (5) Business Days from the effective date of this Appendix 8 to the GIP, that they wish to be included in either the SGIP Transition Cluster, studied for Full Capacity Deliverability Status, or, if eligible, studied under the Independent Study Process set forth in Section 4 of Appendix Y.
- An Interconnection Request deemed to be included in the SGIP Serial Study Group that wishes to be studied as a Full Capacity Deliverability Status Generating Facility will continue to be processed per the procedures set forth in Appendix S to the CAISO Tariff

for Energy-Only Deliverability Status, with a Full Capacity Delivery Status Deliverability Assessment to be performed as part of the next Interconnection Study Cycle following the completion of the serial portion of the Generating Facility's studies pursuant to Appendix S.

3. Transition of Generating Facilities in SGIP Transition Cluster

- 3.1 An Interconnection Request deemed to be included in the SGIP Transition Cluster (including those Generating Facilities defined as part of the SGIP Serial Study Group who choose to be processed in the SGIP Transition Cluster) that wishes to be studied as an Energy-Only Deliverability Status Generating Facility shall be processed per the procedures set forth in Appendix Y to the CAISO Tariff and studied as part of the Phase II Interconnection Study for the CAISO's first and second Queue Clusters, which is scheduled to begin on January 1, 2011 and be completed on July 31, 2011. Alternatively, Interconnection Requests deemed to be included in the SGIP Transition Cluster may, by indicating in writing within five (5) Business Days from the effective date of this Appendix 8 to the GIP, elect to be studied for Full Capacity Deliverability Status, or, if eligible, as part of the Independent Study Process set forth in Section 4 of Appendix
- 3.2 An Interconnection Request deemed to be included in the SGIP Transition Cluster that wishes to be studied as a Full Capacity Deliverability Status Generating Facility shall be studied for Energy-Only Deliverability Status as part of the Phase II Interconnection Study for the CAISO's first and second Queue Clusters, with a Full Capacity Deliverability Status Deliverability Assessment to be performed as part of the CAISO's fourth Queue Cluster, which is scheduled to begin on June 1, 2011.
- 3.3 An Interconnection Customer in the SGIP Transition Cluster must post, within thirty (30) calendar days of the effective date of this Appendix 8, all of the following: (i) an Interconnection Study Deposit equal to the amount set forth in Section 3.5.1 of Appendix Y, if it has not done so already; and (ii) a demonstration of Site Exclusivity, if it has not done so already. An Interconnection Customer that does not satisfy these posting requirements will be withdrawn from the SGIP Transition Cluster. An Interconnection Customer who withdraws from the SGIP Transition Cluster will be refunded the entire amount of its Interconnection Study Deposit upon withdrawal, less any amounts that the CAISO, Participating TO(s), and third parties have incurred in performing studies on the Interconnection Customer's behalf.
- 3.4 At the conclusion of the Phase II Interconnection Study for the CAISO's first and second Queue Clusters, each Interconnection Customer remaining in the SGIP Transition Cluster shall receive a Phase II Interconnection Study report, which will indicate each Interconnection Customer's allocated share of costs for Interconnection Facilities and Reliability Network Upgrades. If the Interconnection Customer wishes to continue in the queue, the Interconnection Customer must sign and execute aSmall Generator Interconnection Agreement within ninety (90) calendar days of receiving the final report and post the required Interconnection Financial Security as set forth in Section 9.3 of Appendix Y.

Appendix 9 Certification Codes and Standards

IEEE1547 Standard for Interconnecting Distributed Resources with Electric Power Systems (including use of IEEE 1547.1 testing protocols to establish conformity)

UL 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems

IEEE Std 929-2000 IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems

NFPA 70 (2002), National Electrical Code

IEEE Std C37.90.1-1989 (R1994), IEEE Standard Surge Withstand Capability (SWC) Tests for Protective Relays and Relay Systems

IEEE Std C37.90.2 (1995), IEEE Standard Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers

IEEE Std C37.108-1989 (R2002), IEEE Guide for the Protection of Network Transformers

IEEE Std C57.12.44-2000, IEEE Standard Requirements for Secondary Network Protectors

IEEE Std C62.41.2-2002, IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000V and Less) AC Power Circuits

IEEE Std C62.45-1992 (R2002), IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000V and Less) AC Power Circuits

ANSI C84.1-1995 Electric Power Systems and Equipment – Voltage Ratings (60 Hertz)

IEEE Std 100-2000, IEEE Standard Dictionary of Electrical and Electronic Terms

NEMA MG 1-1998, Motors and Small Resources, Revision 3

IEEE Std 519-1992, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems

NEMA MG 1-2003 (Rev 2004), Motors and Generators, Revision 1

Appendix 10

Certification of Small Generator Equipment Packages

- 1.0 Small Generating Facility equipment proposed for use separately or packaged with other equipment in an interconnection system shall be considered certified for interconnected operation if (1) it has been tested in accordance with industry standards for continuous utility interactive operation in compliance with the appropriate codes and standards referenced below by any Nationally Recognized Testing Laboratory (NRTL) recognized by the United States Occupational Safety and Health Administration to test and certify interconnection equipment pursuant to the relevant codes and standards listed in GIP Appendix 9, (2) it has been labeled and is publicly listed by such NRTL at the time of the interconnection application, and (3) such NRTL makes readily available for verification all test standards and procedures it utilized in performing such equipment certification, and, with consumer approval, the test data itself. The NRTL may make such information available on its website and by encouraging such information to be included in the manufacturer's literature accompanying the equipment.
- 2.0 The Interconnection Customer must verify that the intended use of the equipment falls within the use or uses for which the equipment was tested, labeled, and listed by the NRTL.
- 3.0 Certified equipment shall not require further type-test review, testing, or additional equipment to meet the requirements of this interconnection procedure; however, nothing herein shall preclude the need for an on-site commissioning test by the parties to the interconnection nor follow-up production testing by the NRTL.
- 4.0 If the certified equipment package includes only interface components (switchgear, inverters, or other interface devices), then an Interconnection Customer must show that the generator or other electric source being utilized with the equipment package is compatible with the equipment package and is consistent with the testing and listing specified for this type of interconnection equipment.
- 5.0 Provided the generator or electric source, when combined with the equipment package, is within the range of capabilities for which it was tested by the NRTL, and does not violate the interface components' labeling and listing performed by the NRTL, no further design review, testing or additional equipment on the customer side of the point of common coupling shall be required to meet the requirements of this interconnection procedure.
- 6.0 An equipment package does not include equipment provided by the utility.
- 7.0 Any equipment package approved and listed in a state by that state's regulatory body for interconnected operation in that state prior to the effective date of these small generator interconnection procedures shall be considered certified under these procedures for use in that state.

* * *

Appendix Z LGIA For Interconnection Requests Process Under the GIP

LARGE GENERATOR INTERCONNECTION AGREEMENT (LGIA)

[INTERCONNECTION CUSTOMER]

[PARTICIPATING TO]

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

TABLE OF CONTENTS

ARTICLE 1. DEFINITIONS

ARTICLE 2. EFFECTIVE DATE, TERM AND TERMINATION

- 2.1 Effective Date
- 2.2 Term of Agreement
- 2.3 Termination Procedures
 - 2.3.1 Written Notice
 - 2.3.2 Default
 - 2.3.3 Suspension of Work
 - 2.3.4
- 2.4 Termination Costs
 - 2.4.1
 - 2.4.2
 - 2.4.3
- 2.5 Disconnection
- 2.6 Survival

ARTICLE 3. REGULATORY FILINGS AND CAISO TARIFF COMPLIANCE

- 3.1 Filing
- 3.2 Agreement Subject to CAISO Tariff
- 3.3 Relationship Between this LGIA and the CAISO Tariff
- 3.4 Relationship Between this LGIA and the QF PGA

ARTICLE 4. SCOPE OF SERVICE

- 4.1 Interconnection Service
- 4.2 Provision of Service
- 4.3 Performance Standards
- 4.4 No Transmission Service
- 4.5 Interconnection Customer Provided Services

ARTICLE 5. INTERCONNECTION FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION

- 5.1 Options
 - 5.1.1 Standard Option
 - 5.1.2 Alternate Option
 - 5.1.3 Option to Build
 - 5.1.4 Negotiated Option
- 5.2 General Conditions Applicable to Option to Build
- 5.3 Liquidated Damages
- 5.4 Power System Stabilizers

- 5.5 Equipment Procurement
 - 5.5.1
 - 5.5.2
 - 5.5.3
- 5.6 Construction Commencement
 - 5.6.1
 - 5.6.2
 - 5.6.3
 - 5.6.4
- 5.7 Work Progress
- 5.8 Information Exchange
- 5.9 Limited Operation
- 5.10 Interconnection Customer's Interconnection Facilities
 - 5.10.1 Large Generating Facility and Interconnection Customer's Interconnection Facilities Specifications
 - 5.10.2 Participating TO's and CAISO's Review
 - 5.10.3 Interconnection Customer's Interconnection Facilities Construction
 - 5.10.4 Interconnection Customer to Meet Requirements of the Participating TO's Interconnection Handbook
- 5.11 Participating TO's Interconnection Facilities Construction
- 5.12 Access Rights
- 5.13 Lands of Other Property Owners
- 5.14 Permits
- 5.15 Early Construction of Base Case Facilities
- 5.16 Suspension
- 5.17 Taxes
 - 5.17.1 Interconnection Customer Payments Not Taxable
 - 5.17.2 Representations And Covenants
 - 5.17.3 Indemnification for the Cost Consequences of Current Tax Liability Imposed Upon the Participating TO
 - 5.17.4 Tax Gross-Up Amount
 - 5.17.5 Private Letter Ruling or Change or Clarification of Law
 - 5.17.6 Subsequent Taxable Events
 - 5.17.7 Contests
 - 5.17.8 Refund
 - 5.17.9 Taxes Other Than Income Taxes
- 5.18 Tax Status
- 5.19 Modification
 - 5.19.1 General
 - 5.19.2 Standards
 - 5.19.3 Modification Costs

ARTICLE 6. TESTING AND INSPECTION

- 6.1 Pre-Commercial Operation Date Testing and Modifications
- 6.2 Post-Commercial Operation Date Testing and Modifications
- 6.3 Right to Observe Testing
- 6.4 Right to Inspect

ARTICLE 7. METERING

- 7.1 General
- 7.2 Check Meters
- 7.3 Participating TO Retail Metering

ARTICLE 8. COMMUNICATIONS

8.1 Interconnection Customer Obligations

- 8.2 Remote Terminal Unit
- 8.3 No Annexation

ARTICLE 9. OPERATIONS

- 9.1 General
- 9.2 Balancing Authority Area Notification
- 9.3 CAISO and Participating TO Obligations
- 9.4 Interconnection Customer Obligations
- 9.5 Start-Up and Synchronization
- 9.6 Reactive Power
 - 9.6.1 Power Factor Design Criteria
 - 9.6.2 Voltage Schedules
 - 9.6.2.1 Governors and Regulators
 - 9.6.3 Payment for Reactive Power
- 9.7 Outages and Interruptions
 - 9.7.1 Outages
 - 9.7.1.1 Outage Authority and Coordination
 - 9.7.1.2 Outage Schedules
 - 9.7.1.3 Outage Restoration
 - 9.7.2 Interruption of Service
 - 9.7.2.1
 - 9.7.2.2
 - 9.7.2.3
 - 9.7.2.4
 - 9.7.2.5
 - 9.7.3 Under-Frequency and Over-Frequency Conditions
 - 9.7.4 System Protection and Other Control Requirements
 - 9.7.4.1 System Protection Facilities
 - 9.7.4.2
 - 9.7.4.3
 - 9.7.4.4
 - 9.7.4.5
 - 9.7.4.6
 - 9.7.5 Requirements for Protection
 - 9.7.6 Power Quality
- 9.8 Switching and Tagging Rules
- 9.9 Use of Interconnection Facilities by Third Parties
 - 9.9.1 Purpose of Interconnection Facilities
 - 9.9.2 Third Party Users
- 9.10 Disturbance Analysis Data Exchange

ARTICLE 10. MAINTENANCE

- 10.1 Participating TO Obligations
- 10.2 Interconnection Customer Obligations
- 10.3 Coordination
- 10.4 Secondary Systems
- 10.5 Operating and Maintenance Expenses

ARTICLE 11. PERFORMANCE OBLIGATION

- 11.1 Interconnection Customer's Interconnection Facilities
- 11.2 Participating TO's Interconnection Facilities
- 11.3 Network Upgrades and Distribution Upgrades
- 11.4 Transmission Credits
 - 11.4.1 Repayment of Amounts Advanced for Network Upgrades
 - 11.4.2 Special Provisions for Affected Systems

11.4.3

11.5 Provision of Security

11.5.1

11.5.2

11.5.3

11.6 Interconnection Customer Compensation

11.6.1 Interconnection Customer Compensation for Actions During Emergency Condition

ARTICLE 12. INVOICE

- 12.1 General
- 12.2 Final Invoice
- 12.3 Payment
- 12.4 Disputes

ARTICLE 13. EMERGENCIES

- 13.1 [Reserved]
- 13.2 Obligations
- 13.3 Notice
- 13.4 Immediate Action
- 13.5 CAISO and Participating TO Authority
 - 13.5.1 General
 - 13.5.2 Reduction and Disconnection
- 13.6 Interconnection Customer Authority
- 13.7 Limited Liability

ARTICLE 14. REGULATORY REQUIREMENTS AND GOVERNING LAWS

- 14.1 Regulatory Requirements
- 14.2 Governing Law

14.2.1

14.2.2

14.2.3

ARTICLE 15. NOTICES

- 15.1 General
- 15.2 Billings and Payments
- 15.3 Alternative Forms of Notice
- 15.4 Operations and Maintenance Notice

ARTICLE 16. FORCE MAJEURE

16.1 Force Majeure

16.1.1

16.1.2

ARTICLE 17. DEFAULT

17.1 Default

17.1.1 General

17.1.2 Right to Terminate

ARTICLE 18. INDEMNITY, CONSEQUENTIAL DAMAGES, AND INSURANCE

18.1 Indemnity

18.1.1 Indemnified Party

18.1.2 Indemnifying Party

18.1.3 Indemnity Procedures

18.2 Consequential Damages

18.3 Insurance

18.3.1

18.3.2

18.3.3

10.0.0

18.3.4

18.3.5

18.3.6

18.3.7

18.3.8

18.3.9

18.3.10 18.3.11

ARTICLE 19. ASSIGNMENT

19.1 Assignment

ARTICLE 20. SEVERABILITY

20.1 Severability

ARTICLE 21. COMPARABILITY

21.1 Comparability

ARTICLE 22. CONFIDENTIALITY

22.1 Confidentiality

22.1.1 Term

22.1.2 Scope

22.1.3 Release of Confidential Information

22.1.4 Rights

22.1.5 No Warranties

22.1.6 Standard of Care

22.1.7 Order of Disclosure

22.1.8 Termination of Agreement

22.1.9 Remedies

22.1.10 Disclosure to FERC, its Staff, or a State

22.1.11

ARTICLE 23. ENVIRONMENTAL RELEASES

23.1

ARTICLE 24. INFORMATION REQUIREMENTS

24.1 Information Acquisition

24.2 Information Submission by Participating TO

24.3 Updated Information Submission by Interconnection Customer

24.4 Information Supplementation

ARTICLE 25. INFORMATION ACCESS AND AUDIT RIGHTS

25.1 Information Access

25.2 Reporting of Non-Force Majeure Events

25.3 Audit Rights

25.3.1

25.3.2

25.4 Audit Rights Periods

25.4.1 Audit Rights Period for Construction-Related

Accounts and Records

25.4.2 Audit Rights Period for All Other

Accounts and Records

25.5 Audit Results

ARTICLE 26. SUBCONTRACTORS

- 26.1 General
- 26.2 Responsibility of Principal
- 26.3 No Limitation by Insurance

ARTICLE 27. DISPUTES

- 27.1 Submission
- 27.2 External Arbitration Procedures
- 27.3 Arbitration Decisions
- 27.4 Costs

ARTICLE 28. REPRESENTATIONS, WARRANTIES AND COVENANTS

- 28.1 General
 - 28.1.1 Good Standing
 - 28.1.2 Authority
 - 28.1.3 No Conflict
 - 28.1.4 Consent and Approval

ARTICLE 29. [RESERVED]

ARTICLE 30. MISCELLANEOUS

- 30.1 Binding Effect
- 30.2 Conflicts
- 30.3 Rules of Interpretation
- 30.4 Entire Agreement
- 30.5 No Third Party Beneficiaries
- 30.6 Waiver
- 30.7 Headings
- 30.8 Multiple Counterparts
- 30.9 Amendment
- 30.10 Modification by the Parties
- 30.11 Reservation of Rights
- 30.12 No Partnership
- 30.13 Joint and Several Obligations

Appendices

Annendix A	Interconnection Facilitie	s Network Ungrades	and Distribution Upgrades
ADDCHUIA A		3. INCLINOIR ODUIAUC	

- Appendix B Milestones
- Appendix C Interconnection Details
- Appendix D Security Arrangements Details
- Appendix E Commercial Operation Date
- Appendix F Addresses for Delivery of Notices and Billings
- Appendix G Interconnection Customer's Proportional Share of Costs of Network Upgrades for Applicable Project Group
- Appendix H Interconnection Requirements for a Wind Generating Plant

LARGE GENERATOR INTERCONNECTION AGREEMENT

[INTERCONNECTION CUSTOMER]

[PARTICIPATING TO]

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

THIS LARGE GENERATOR INTERCONNECTION AGREEMENT ("LGIA") is made and entered
into this day of 20, by and among, a organized and existing under the laws of the State/Commonwealth of ("Interconnection Customer" with a Large Generating Facility),, a corporation organized and existing under the laws of the State of California ("Participating TO"), and California Independent System Operator Corporation, a California nonprofit public benefit corporation organized and existing under the laws of the State of California ("CAISO"). Interconnection Customer, Participating TO, and CAISO each may be referred to as a "Party" or collectively as the "Parties."
RECITALS
WHEREAS, CAISO exercises Operational Control over the CAISO Controlled Grid; and
WHEREAS, the Participating TO owns, operates, and maintains the Participating TO's Transmission System; and
WHEREAS, Interconnection Customer intends to own, lease and/or control and operate the Generating Facility identified as a Large Generating Facility in Appendix C to this LGIA; and
WHEREAS, Interconnection Customer, Participating TO, and CAISO have agreed to enter into this LGIA for the purpose of interconnecting the Large Generating Facility with the Participating TO's Transmission System;
NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein, it is agreed:
When used in this LGIA, terms with initial capitalization that are not defined in Article 1 shall have

Article 1. Definitions

the meanings specified in the Article in which they are used.

Adverse System Impact shall mean the negative effects due to technical or operational limits on conductors or equipment being exceeded that may compromise the safety and reliability of the electric system.

Affected System shall mean an electric system other than the CAISO Controlled Grid that may be affected by the proposed interconnection, including the Participating TO's electric system that is not part of the CAISO Controlled Grid.

Affiliate shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

Applicable Laws and Regulations shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

Applicable Reliability Council shall mean the Western Electricity Coordinating Council or its successor.

Applicable Reliability Standards shall mean the requirements and guidelines of NERC, the Applicable Reliability Council, and the Balancing Authority Area of the Participating TO's Transmission System to which the Generating Facility is directly connected, including requirements adopted pursuant to Section 215 of the Federal Power Act.

Balancing Authority shall mean the responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.

Balancing Authority Area shall mean the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.

Base Case shall mean the base case power flow, short circuit, and stability data bases used for the Interconnection Studies.

Breach shall mean the failure of a Party to perform or observe any material term or condition of this LGIA.

Breaching Party shall mean a Party that is in Breach of this LGIA.

Business Day shall mean Monday through Friday, excluding federal holidays and the day after Thanksgiving Day.

CAISO Controlled Grid shall mean the system of transmission lines and associated facilities of the parties to the Transmission Control Agreement that have been placed under the CAISO's Operational Control.

CAISO Tariff shall mean the CAISO's tariff, as filed with FERC, and as amended or supplemented from time to time, or any successor tariff.

Calendar Day shall mean any day including Saturday, Sunday or a federal holiday.

Commercial Operation shall mean the status of an Electric Generating Unit or project phase at a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

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

Confidential Information shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the

information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, subject to Article 22.1.2.

Default shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of this LGIA.

Distribution System shall mean those non-CAISO-controlled transmission and distribution facilities owned by the Participating TO.

Distribution Upgrades shall mean the additions, modifications, and upgrades to the Participating TO's Distribution System. Distribution Upgrades do not include Interconnection Facilities.

Effective Date shall mean the date on which this LGIA becomes effective upon execution by all Parties subject to acceptance by FERC, or if filed unexecuted, upon the date specified by FERC.

Electric Generating Unit shall mean an individual electric generator and its associated plant and apparatus whose electrical output is capable of being separately identified and metered.

Emergency Condition shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the CAISO, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the CAISO Controlled Grid or the electric systems of others to which the CAISO Controlled Grid is directly connected; (3) that, in the case of the Participating TO, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Participating TO's Transmission System, Participating TO's Interconnection Facilities, Distribution System, or the electric systems of others to which the Participating TO's electric system is directly connected; or (4) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions; provided, that Interconnection Customer is not obligated by this LGIA to possess black start capability.

Environmental Law shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

Federal Power Act shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a et seq.

FERC shall mean the Federal Energy Regulatory Commission or its successor.

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

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

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

Generator Interconnection Procedures (GIP) shall mean the CAISO protocol that sets forth the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that is included in CAISO Tariff Appendix Y.

Generator Interconnection Study Process Agreement shall mean the agreement between the Interconnection Customer and the CAISO for the conduct of the Interconnection Studies.

Good Utility Practice shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be any one of a number of the optimum practices, methods, or acts to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

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

Governing Independent Study Process Interconnection Studies shall mean the engineering study(ies) conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), that evaluates the impact of the proposed interconnection on the safety and reliability of the Participating TO's Transmission System and, if applicable, an Affected System, which shall consist primarily of a Facilities Study as described in Section 4.5 of the Generation Interconnection Procedures or a System Impact Study as described in Section 4.4 of the Generation Interconnection Procedures.

Hazardous Substances shall mean any chemicals, materials or substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "hazardous constituents," "restricted hazardous materials," "extremely hazardous substances," "toxic substances," "radioactive substances," "contaminants," "pollutants," "toxic pollutants" or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

Initial Synchronization Date shall mean the date upon which an Electric Generating Unit is initially synchronized and upon which Trial Operation begins.

In-Service Date shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Participating TO's Interconnection Facilities to obtain back feed power.

Interconnection Customer's Interconnection Facilities shall mean all facilities and equipment, as identified in Appendix A of this LGIA, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Participating TO's Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

Interconnection Facilities shall mean the Participating TO's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Participating TO's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

Interconnection Financial Security shall mean any of the financial instruments listed in Section 9.1 of the GIP that are posted by an Interconnection Customer.

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

Interconnection Request shall mean a request, in the form of Appendix 1 to the Generator Interconnection Procedures, in accordance with the CAISO Tariff.

Interconnection Service shall mean the service provided by the Participating TO and CAISO associated with interconnecting the Interconnection Customer's Generating Facility to the Participating TO's Transmission System and enabling the CAISO Controlled Grid to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of this LGIA, the Participating TO's Transmission Owner Tariff, and the CAISO Tariff.

Interconnection Study shall mean

- (i) For Interconnection Requests processed under the Cluster Study Process described in the Generation Interconnection Procedures. either of the following studies: the Phase I Interconnection Study or the Phase II Interconnection Study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), pursuant to the Generator Interconnection Procedures;
- (ii) For Interconnection Requests processed under the Independent Study Process described in the Generation Interconnection Procedures, the governing study(ies) conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), pursuant to the Generation Interconnection Procedures, which shall consist primarily of a Facilities Study as described in Section 4.5 of the GIP or a System Impact Study as described in Section 4.4 of the GIP.

IRS shall mean the Internal Revenue Service.

Large Generating Facility shall mean a Generating Facility having a Generating Facility Capacity of more than 20 MW.

Loss shall mean any and all damages, losses, and claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties.

Material Modification shall mean those modifications that have a material impact on the cost or timing of any Interconnection Request or any other valid interconnection request with a later queue priority date.

Metering Equipment shall mean all metering equipment installed or to be installed for measuring the output of the Generating Facility pursuant to this LGIA at the metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

NERC shall mean the North American Electric Reliability Council or its successor organization.

Network Upgrades shall be Participating TO's Delivery Network Upgrades and Participating TO's Reliability Network Upgrades.

Operational Control shall mean the rights of the CAISO under the Transmission Control Agreement and the CAISO Tariff to direct the parties to the Transmission Control Agreement how to operate their transmission lines and facilities and other electric plant affecting the reliability of those lines and facilities for the purpose of affording comparable non-discriminatory transmission access and meeting applicable reliability criteria.

Participating TO's Delivery Network Upgrades shall mean the additions, modifications, and upgrades to the Participating TO's Transmission System at or beyond the Point of Interconnection, other than Reliability Network Upgrades, identified in the Interconnection Studies, as identified in Appendix A, to relieve constraints on the CAISO Controlled Grid.

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

Participating TO's Reliability Network Upgrades shall mean the additions, modifications, and upgrades to the Participating TO's Transmission System at or beyond the Point of Interconnection, identified in the Interconnection Studies, as identified in Appendix A, necessary to interconnect the Large Generating Facility safely and reliably to the Participating TO's Transmission System, which would not have been necessary but for the interconnection of the Large Generating Facility, including additions, modifications, and upgrades necessary to remedy short circuit or stability problems resulting from the interconnection of the Large Generating Facility to the Participating TO's Transmission System. Participating TO's Reliability Network Upgrades also include, consistent with Applicable Reliability Standards and Applicable Reliability Council practice, the Participating TO's facilities necessary to mitigate any adverse impact the Large Generating Facility's interconnection may have on a path's Applicable Reliability Council rating. Participating TO's Reliability Network Upgrades do not include any Participating TO's Delivery Network Upgrades.

Participating TO's Transmission System shall mean the facilities owned and operated by the Participating TO and that have been placed under the CAISO's Operational Control, which facilities form part of the CAISO Controlled Grid.

Party or Parties shall mean the Participating TO, CAISO, Interconnection Customer or the applicable combination of the above.

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

Phase II Interconnection Study shall mean an engineering and operational study conducted or caused to be performed by the CAISO once per calendar year, in coordination with the applicable Participating TO(s), to determine the Point of Interconnection and a list of facilities (including the Participating TO's Interconnection Facilities, Network Upgrades, Distribution Upgrades, and Stand Alone Network Upgrades), the cost of those facilities, and the time required to interconnect the Generating Facility(ies) with the Participating TO's Transmission System.

Point of Change of Ownership shall mean the point, as set forth in Appendix A to this LGIA, where the Interconnection Customer's Interconnection Facilities connect to the Participating TO's Interconnection Facilities.

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

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

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

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

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

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

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

Transmission Control Agreement shall mean CAISO FERC Electric Tariff No. 7.

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

Article 2. Effective Date, Term And Termination

- **2.1 Effective Date.** This LGIA shall become effective upon execution by all Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by FERC. The CAISO and Participating TO shall promptly file this LGIA with FERC upon execution in accordance with Article 3.1, if required.
- **2.2 Term of Agreement.** Subject to the provisions of Article 2.3, this LGIA shall remain in effect for a period of _____ years from the Effective Date (Term Specified in Individual Agreements to be ten (10) years or such other longer period as the Interconnection Customer may request) and shall be automatically renewed for each successive one-year period thereafter.

2.3 Termination Procedures.

- **2.3.1 Written Notice.** This LGIA may be terminated by the Interconnection Customer after giving the CAISO and the Participating TO ninety (90) Calendar Days advance written notice, or by the CAISO and the Participating TO notifying FERC after the Generating Facility permanently ceases Commercial Operation.
- **2.3.2 Default.** A Party may terminate this LGIA in accordance with Article 17.
- 2.3.3 Suspension of Work. This LGIA may be deemed terminated in accordance with Article 5.16.
- 2.3.4 Notwithstanding Articles 2.3.1, 2.3.2, and 2.3.3, no termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this LGIA (if applicable), which notice has been accepted for filing by FERC, and the Interconnection Customer has fulfilled its termination cost obligations under Article 2.4.
- 2.4 Termination Costs. Immediately upon the other Parties' receipt of a notice of the termination of this LGIA pursuant to Article 2.3 above, the CAISO and the Participating TO will determine the total cost responsibility of the Interconnection Customer. If, as of the date of the other Parties' receipt of the notice of termination, the Interconnection Customer has not already paid its share of Network Upgrade costs, as set forth in Appendix G to this LGIA, the Participating TO will liquidate the Interconnection Customer's Interconnection Financial Security associated with its cost responsibility for Network Upgrades, in accordance with Section 9.4 of the GIP.

The Interconnection Customer will also be responsible for all costs incurred or irrevocably committed to be incurred in association with the construction of the Participating TO's Interconnection Facilities (including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment) and other such expenses, including any Distribution Upgrades for which the Participating TO or CAISO has incurred expenses or has irrevocably committed to incur expenses and has not been reimbursed by the Interconnection Customer, as of the date of the other Parties' receipt of the notice of termination, subject to the limitations set forth in this Article 2.4. Nothing in this Article 2.4 shall limit the Parties' rights under Article 17. If, as of the date of the other Parties' receipt of the notice of termination, the Interconnection Customer has not already reimbursed the Participating TO and the CAISO for costs incurred to construct the Participating TO's Interconnection Facilities, the Participating TO will liquidate the Interconnection Customer's Interconnection Financial Security associated with the construction of the Participating TO's Interconnection Facilities, in accordance with Section 9.4 of the GIP. If the amount of the Interconnection Financial Security liquidated by the Participating TO under this Article 2.4 is insufficient to compensate the CAISO and the Participating TO for actual costs associated with the construction of the Participating TO's Interconnection Facilities contemplated in this Article, any additional amounts will be the responsibility of the Interconnection Customer,

subject to the provisions of Section 9.4 of the GIP. Any such additional amounts due from the Interconnection Customer beyond the amounts covered by its Interconnection Financial Security will be due to the Participating TO immediately upon termination of this LGIA in accordance with Section 9.4 of the GIP.

If the amount of the Interconnection Financial Security exceeds the Interconnection Customer's cost responsibility under Section 9.4 of the GIP, any excess amount will be released to the Interconnection Customer in accordance with Section 9.4 of the GIP.

- Notwithstanding the foregoing, in the event of termination by a Party, all Parties shall use 2.4.1 commercially Reasonable Efforts to mitigate the costs, damages and charges arising as a consequence of termination. With respect to any portion of the Participating TO's Interconnection Facilities that have not yet been constructed or installed, the Participating TO shall to the extent possible and with the Interconnection Customer's authorization cancel any pending orders of, or return, any materials or equipment for, or contracts for construction of, such facilities; provided that in the event the Interconnection Customer elects not to authorize such cancellation, the Interconnection Customer shall assume all payment obligations with respect to such materials, equipment, and contracts, and the Participating TO shall deliver such material and equipment, and, if necessary, assign such contracts, to the Interconnection Customer as soon as practicable, at the Interconnection Customer's expense. To the extent that the Interconnection Customer has already paid the Participating TO for any or all such costs of materials or equipment not taken by the Interconnection Customer, the Participating TO shall promptly refund such amounts to the Interconnection Customer, less any costs, including penalties, incurred by the Participating TO to cancel any pending orders of or return such materials. equipment, or contracts.
- 2.4.2 The Participating TO may, at its option, retain any portion of such materials, equipment, or facilities that the Interconnection Customer chooses not to accept delivery of, in which case the Participating TO shall be responsible for all costs associated with procuring such materials, equipment, or facilities.
- 2.4.3 With respect to any portion of the Interconnection Facilities, and any other facilities already installed or constructed pursuant to the terms of this LGIA, Interconnection Customer shall be responsible for all costs associated with the removal, relocation or other disposition or retirement of such materials, equipment, or facilities.
- **2.5 Disconnection.** Upon termination of this LGIA, the Parties will take all appropriate steps to disconnect the Large Generating Facility from the Participating TO's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this LGIA or such non-terminating Party otherwise is responsible for these costs under this LGIA.
- **Survival.** This LGIA shall continue in effect after termination to the extent necessary to provide for final billings and payments and for costs incurred hereunder, including billings and payments pursuant to this LGIA; to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this LGIA was in effect; and to permit each Party to have access to the lands of the other Parties pursuant to this LGIA or other applicable agreements, to disconnect, remove or salvage its own facilities and equipment.

Article 3. Regulatory Filings And CAISO Tariff Compliance

- 3.1 Filing. The Participating TO and the CAISO shall file this LGIA (and any amendment hereto) with the appropriate Governmental Authority(ies), if required. The Interconnection Customer may request that any information so provided be subject to the confidentiality provisions of Article 22. If the Interconnection Customer has executed this LGIA, or any amendment thereto, the Interconnection Customer shall reasonably cooperate with the Participating TO and CAISO with respect to such filing and to provide any information reasonably requested by the Participating TO or CAISO needed to comply with applicable regulatory requirements.
- **3.2 Agreement Subject to CAISO Tariff.** The Interconnection Customer will comply with all applicable provisions of the CAISO Tariff, including the GIP.
- 3.3 Relationship Between this LGIA and the CAISO Tariff. With regard to rights and obligations between the Participating TO and the Interconnection Customer, if and to the extent a matter is specifically addressed by a provision of this LGIA (including any appendices, schedules or other attachments to this LGIA), the provisions of this LGIA shall govern. If and to the extent a provision of this LGIA is inconsistent with the CAISO Tariff and dictates rights and obligations between the CAISO and the Participating TO or the CAISO and the Interconnection Customer, the CAISO Tariff shall govern.
- **3.4** Relationship Between this LGIA and the QF PGA. With regard to the rights and obligations of a Qualifying Facility that has entered into a QF PGA with the CAISO and has entered into this LGIA, if and to the extent a matter is specifically addressed by a provision of the QF PGA that is inconsistent with this LGIA, the terms of the QF PGA shall govern.

Article 4. Scope Of Service

4.1 Interconnection Service. Interconnection Service allows the Interconnection Customer to connect the Large Generating Facility to the Participating TO's Transmission System and be eligible to deliver the Large Generating Facility's output using the available capacity of the CAISO Controlled Grid. To the extent the Interconnection Customer wants to receive Interconnection Service, the Participating TO shall construct facilities identified in Appendices A and C that the Participating TO is responsible to construct.

Interconnection Service does not necessarily provide the Interconnection Customer with the capability to physically deliver the output of its Large Generating Facility to any particular load on the CAISO Controlled Grid without incurring congestion costs. In the event of transmission constraints on the CAISO Controlled Grid, the Interconnection Customer's Large Generating Facility shall be subject to the applicable congestion management procedures in the CAISO Tariff in the same manner as all other resources.

- **4.2 Provision of Service.** The Participating TO and the CAISO shall provide Interconnection Service for the Large Generating Facility.
- 4.3 Performance Standards. Each Party shall perform all of its obligations under this LGIA in accordance with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice, and to the extent a Party is required or prevented or limited in taking any action by such regulations and standards, such Party shall not be deemed to be in Breach of this LGIA for its compliance therewith. If such Party is the CAISO or Participating TO, then that Party shall amend the LGIA and submit the amendment to FERC for approval.
- **4.4 No Transmission Service.** The execution of this LGIA does not constitute a request for, nor the provision of, any transmission service under the CAISO Tariff, and does not convey any right to deliver electricity to any specific customer or point of delivery.

4.5 Interconnection Customer Provided Services. The services provided by Interconnection Customer under this LGIA are set forth in Article 9.6 and Article 13.5.1. Interconnection Customer shall be paid for such services in accordance with Article 11.6.

Article 5. Facilities Engineering, Procurement, And Construction

Interconnection Facilities, Network Upgrades, and Distribution Upgrades shall be studied, designed, and constructed pursuant to Good Utility Practice. Such studies, design and construction shall be based on the assumed accuracy and completeness of all technical information received by the Participating TO and the CAISO from the Interconnection Customer associated with interconnecting the Large Generating Facility.

- 5.1 Options. Unless otherwise mutually agreed among the Parties, the Interconnection Customer shall select the In-Service Date, Initial Synchronization Date, and Commercial Operation Date; and either Standard Option or Alternate Option set forth below for completion of the Participating TO's Interconnection Facilities and Network Upgrades as set forth in Appendix A, Interconnection Facilities, Network Upgrades, and Distribution Upgrades, and such dates and selected option shall be set forth in Appendix B, Milestones.
 - 5.1.1 Standard Option. The Participating TO shall design, procure, and construct the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, using Reasonable Efforts to complete the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades by the dates set forth in Appendix B, Milestones. The Participating TO shall not be required to undertake any action which is inconsistent with its standard safety practices, its material and equipment specifications, its design criteria and construction procedures, its labor agreements, and Applicable Laws and Regulations. In the event the Participating TO reasonably expects that it will not be able to complete the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades by the specified dates, the Participating TO shall promptly provide written notice to the Interconnection Customer and the CAISO and shall undertake Reasonable Efforts to meet the earliest dates thereafter.
 - **5.1.2 Alternate Option.** If the dates designated by the Interconnection Customer are acceptable to the Participating TO, the Participating TO shall so notify the Interconnection Customer within thirty (30) Calendar Days, and shall assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities by the designated dates.

If the Participating TO subsequently fails to complete the Participating TO's Interconnection Facilities by the In-Service Date, to the extent necessary to provide back feed power; or fails to complete Network Upgrades by the Initial Synchronization Date to the extent necessary to allow for Trial Operation at full power output, unless other arrangements are made by the Parties for such Trial Operation; or fails to complete the Network Upgrades by the Commercial Operation Date, as such dates are reflected in Appendix B, Milestones; the Participating TO shall pay the Interconnection Customer liquidated damages in accordance with Article 5.3, Liquidated Damages, provided, however, the dates designated by the Interconnection Customer shall be extended day for day for each day that the CAISO refuses to grant clearances to install equipment.

5.1.3 Option to Build. If the dates designated by the Interconnection Customer are not acceptable to the Participating TO, the Participating TO shall so notify the Interconnection Customer within thirty (30) Calendar Days, and unless the Parties agree otherwise, the Interconnection Customer shall have the option to assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades. If the Interconnection Customer elects to exercise its option to assume responsibility for the design, procurement and construction of the

Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, it shall so notify the Participating TO within thirty (30) Calendar Days of receipt of the Participating TO's notification that the designated dates are not acceptable to the Participating TO. The Participating TO, CAISO, and Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Appendix A to this LGIA. Except for Stand Alone Network Upgrades, the Interconnection Customer shall have no right to construct Network Upgrades under this option.

- 5.1.4 Negotiated Option. If the Interconnection Customer elects not to exercise its option under Article 5.1.3, Option to Build, the Interconnection Customer shall so notify the Participating TO within thirty (30) Calendar Days of receipt of the Participating TO's notification that the designated dates are not acceptable to the Participating TO, and the Parties shall in good faith attempt to negotiate terms and conditions (including revision of the specified dates and liquidated damages, the provision of incentives or the procurement and construction of a portion of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades by the Interconnection Customer) pursuant to which the Participating TO is responsible for the design, procurement and construction of the Participating TO's Interconnection Facilities and Network Upgrades. If the Parties are unable to reach agreement on such terms and conditions, the Participating TO shall assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Network Upgrades pursuant to Article 5.1.1, Standard Option.
- **5.2 General Conditions Applicable to Option to Build.** If the Interconnection Customer assumes responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades,
 - (1) the Interconnection Customer shall engineer, procure equipment, and construct the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by the Participating TO;
 - (2) The Interconnection Customer's engineering, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law to which the Participating TO would be subject in the engineering, procurement or construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;
 - (3) the Participating TO shall review, and the Interconnection Customer shall obtain the Participating TO's approval of, the engineering design, equipment acceptance tests, and the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, which approval shall not be unreasonably withheld, and the CAISO may, at its option, review the engineering design, equipment acceptance tests, and the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;
 - (4) prior to commencement of construction, the Interconnection Customer shall provide to the Participating TO, with a copy to the CAISO for informational purposes, a schedule for construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, and shall promptly respond to requests for information from the Participating TO:
 - (5) at any time during construction, the Participating TO shall have the right to gain unrestricted access to the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;

- (6) at any time during construction, should any phase of the engineering, equipment procurement, or construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by the Participating TO, the Interconnection Customer shall be obligated to remedy deficiencies in that portion of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;
- (7) the Interconnection Customer shall indemnify the CAISO and Participating TO for claims arising from the Interconnection Customer's construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to Article 18.1 Indemnity;
- (8) The Interconnection Customer shall transfer control of the Participating TO's Interconnection Facilities to the Participating TO and shall transfer Operational Control of Stand Alone Network Upgrades to the CAISO;
- (9) Unless the Parties otherwise agree, the Interconnection Customer shall transfer ownership of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the Participating TO. As soon as reasonably practicable, but within twelve months after completion of the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, the Interconnection Customer shall provide an invoice of the final cost of the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the Participating TO, which invoice shall set forth such costs in sufficient detail to enable the Participating TO to reflect the proper costs of such facilities in its transmission rate base and to identify the investment upon which refunds will be provided;
- (10) the Participating TO shall accept for operation and maintenance the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2; and
- (11) The Interconnection Customer's engineering, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of the "Option to Build" conditions set forth in Appendix C. Interconnection Customer shall deliver to the Participating TO "as-built" drawings, information, and any other documents that are reasonably required by the Participating TO to assure that the Interconnection Facilities and Stand-Alone Network Upgrades are built to the standards and specifications required by the Participating TO.
- 5.3 Liquidated Damages. The actual damages to the Interconnection Customer, in the event the Participating TO's Interconnection Facilities or Network Upgrades are not completed by the dates designated by the Interconnection Customer and accepted by the Participating TO pursuant to subparagraphs 5.1.2 or 5.1.4, above, may include Interconnection Customer's fixed operation and maintenance costs and lost opportunity costs. Such actual damages are uncertain and impossible to determine at this time. Because of such uncertainty, any liquidated damages paid by the Participating TO to the Interconnection Customer in the event that the Participating TO does not complete any portion of the Participating TO's Interconnection Facilities or Network Upgrades by the applicable dates, shall be an amount equal to ½ of 1 percent per day of the actual cost of the Participating TO's Interconnection Facilities and Network Upgrades, in the aggregate, for which the Participating TO has assumed responsibility to design, procure and construct.

However, in no event shall the total liquidated damages exceed 20 percent of the actual cost of the Participating TO's Interconnection Facilities and Network Upgrades for which the Participating TO has assumed responsibility to design, procure, and construct. The foregoing payments will be

made by the Participating TO to the Interconnection Customer as just compensation for the damages caused to the Interconnection Customer, which actual damages are uncertain and impossible to determine at this time, and as reasonable liquidated damages, but not as a penalty or a method to secure performance of this LGIA. Liquidated damages, when the Parties agree to them, are the exclusive remedy for the Participating TO's failure to meet its schedule.

No liquidated damages shall be paid to the Interconnection Customer if: (1) the Interconnection Customer is not ready to commence use of the Participating TO's Interconnection Facilities or Network Upgrades to take the delivery of power for the Electric Generating Unit's Trial Operation or to export power from the Electric Generating Unit on the specified dates, unless the Interconnection Customer would have been able to commence use of the Participating TO's Interconnection Facilities or Network Upgrades to take the delivery of power for Electric Generating Unit's Trial Operation or to export power from the Electric Generating Unit, but for the Participating TO's delay; (2) the Participating TO's failure to meet the specified dates is the result of the action or inaction of the Interconnection Customer or any other interconnection customer who has entered into an interconnection agreement with the CAISO and/or Participating TO, action or inaction by the CAISO, or any cause beyond the Participating TO's reasonable control or reasonable ability to cure; (3) the Interconnection Customer has assumed responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades; or (4) the Parties have otherwise agreed.

In no event shall the CAISO have any responsibility or liability to the Interconnection Customer for liquidated damages pursuant to the provisions of this Article 5.3.

- Power System Stabilizers. The Interconnection Customer shall procure, install, maintain and operate Power System Stabilizers in accordance with Applicable Reliability Standards, the guidelines and procedures established by the Applicable Reliability Council, and the provisions of Section 4.6.5.1 of the CAISO Tariff. The CAISO reserves the right to establish reasonable minimum acceptable settings for any installed Power System Stabilizers, subject to the design and operating limitations of the Large Generating Facility. If the Large Generating Facility's Power System Stabilizers are removed from service or not capable of automatic operation, the Interconnection Customer shall immediately notify the CAISO and the Participating TO and restore the Power System Stabilizers to operation as soon as possible. The CAISO shall have the right to order the reduction in output or disconnection of the Large Generating Facility if the reliability of the CAISO Controlled Grid would be adversely affected as a result of improperly tuned Power System Stabilizers. The requirements of this Article 5.4 shall not apply to wind generators of the induction type.
- 5.5 Equipment Procurement. If responsibility for construction of the Participating TO's Interconnection Facilities or Network Upgrades is to be borne by the Participating TO, then the Participating TO shall commence design of the Participating TO's Interconnection Facilities or Network Upgrades and procure necessary equipment as soon as practicable after all of the following conditions are satisfied, unless the Parties otherwise agree in writing:
 - 5.5.1 The CAISO, in coordination with the applicable Participating TO(s), has completed the Phase II Interconnection Study or Governing Independent Study Interconnection Study pursuant to the applicable Generator Interconnection Facilities Study Process Agreement or other applicable study process agreement;
 - 5.5.2 The Participating TO has received written authorization to proceed with design and procurement from the Interconnection Customer by the date specified in Appendix B, Milestones; and
 - **5.5.3** The Interconnection Customer has provided security to the Participating TO in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.

- **Construction Commencement.** The Participating TO shall commence construction of the Participating TO's Interconnection Facilities and Network Upgrades for which it is responsible as soon as practicable after the following additional conditions are satisfied:
 - **5.6.1** Approval of the appropriate Governmental Authority has been obtained for any facilities requiring regulatory approval;
 - 5.6.2 Necessary real property rights and rights-of-way have been obtained, to the extent required for the construction of a discrete aspect of the Participating TO's Interconnection Facilities and Network Upgrades;
 - 5.6.3 The Participating TO has received written authorization to proceed with construction from the Interconnection Customer by the date specified in Appendix B, Milestones; and
 - **5.6.4** The Interconnection Customer has provided payment and security to the Participating TO in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.
- Work Progress. The Parties will keep each other advised periodically as to the progress of their respective design, procurement and construction efforts. Any Party may, at any time, request a progress report from another Party. If, at any time, the Interconnection Customer determines that the completion of the Participating TO's Interconnection Facilities will not be required until after the specified In-Service Date, the Interconnection Customer will provide written notice to the Participating TO and CAISO of such later date upon which the completion of the Participating TO's Interconnection Facilities will be required.
- **5.8 Information Exchange.** As soon as reasonably practicable after the Effective Date, the Parties shall exchange information regarding the design and compatibility of the Interconnection Customer's Interconnection Facilities and Participating TO's Interconnection Facilities and compatibility of the Interconnection Facilities with the Participating TO's Transmission System, and shall work diligently and in good faith to make any necessary design changes.
- 5.9 Limited Operation. If any of the Participating TO's Interconnection Facilities or Network Upgrades are not reasonably expected to be completed prior to the Commercial Operation Date of the Electric Generating Unit, the Participating TO and/or CAISO, as applicable, shall, upon the request and at the expense of the Interconnection Customer, perform operating studies on a timely basis to determine the extent to which the Electric Generating Unit and the Interconnection Customer's Interconnection Facilities may operate prior to the completion of the Participating TO's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and this LGIA. The Participating TO and CAISO shall permit Interconnection Customer to operate the Electric Generating Unit and the Interconnection Customer's Interconnection Facilities in accordance with the results of such studies.
- **5.10** Interconnection Customer's Interconnection Facilities. The Interconnection Customer shall, at its expense, design, procure, construct, own and install the Interconnection Customer's Interconnection Facilities, as set forth in Appendix A.
 - 5.10.1 Large Generating Facility and Interconnection Customer's Interconnection Facilities Specifications. In addition to the Interconnection Customer's responsibility to submit technical data with its Interconnection Request as required by Section 3.5.1 of the GIP, the Interconnection Customer shall submit all remaining necessary specifications for the Interconnection Customer's Interconnection Facilities and Large Generating Facility, including System Protection Facilities, to the Participating TO and the CAISO at least one hundred eighty (180) Calendar Days prior to the Initial Synchronization Date; and final specifications for review and comment at least ninety (90) Calendar Days prior to the Initial Synchronization Date. The Participating TO and the CAISO shall review such

specifications pursuant to this LGIA and the GIP to ensure that the Interconnection Customer's Interconnection Facilities and Large Generating Facility are compatible with the technical specifications, operational control, safety requirements, and any other applicable requirements of the Participating TO and the CAISO and comment on such specifications within thirty (30) Calendar Days of the Interconnection Customer's submission. All specifications provided hereunder shall be deemed confidential.

- 5.10.2 Participating TO's and CAISO's Review. The Participating TO's and the CAISO's review of the Interconnection Customer's final specifications shall not be construed as confirming, endorsing, or providing a warranty as to the design, fitness, safety, durability or reliability of the Large Generating Facility, or the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall make such changes to the Interconnection Customer's Interconnection Facilities as may reasonably be required by the Participating TO or the CAISO, in accordance with Good Utility Practice, to ensure that the Interconnection Customer's Interconnection Facilities are compatible with the technical specifications, Operational Control, and safety requirements of the Participating TO or the CAISO.
- 5.10.3 Interconnection Customer's Interconnection Facilities Construction. The Interconnection Customer's Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Participating TO and Interconnection Customer agree on another mutually acceptable deadline, the Interconnection Customer shall deliver to the Participating TO and CAISO "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities and the Electric Generating Unit(s), such as: a one-line diagram, a site plan showing the Large Generating Facility and the Interconnection Customer's Interconnection Facilities, plan and elevation drawings showing the layout of the Interconnection Customer's Interconnection Facilities, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with the Interconnection Customer's step-up transformers, the facilities connecting the Large Generating Facility to the step-up transformers and the Interconnection Customer's Interconnection Facilities, and the impedances (determined by factory tests) for the associated step-up transformers and the Electric Generating Units. The Interconnection Customer shall provide the Participating TO and the CAISO specifications for the excitation system, automatic voltage regulator, Large Generating Facility control and protection settings, transformer tap settings, and communications, if applicable. Any deviations from the relay settings, machine specifications, and other specifications originally submitted by the Interconnection Customer shall be assessed by the Participating TO and the CAISO pursuant to the appropriate provisions of this LGIA and the GIP.
- **5.10.4** Interconnection Customer to Meet Requirements of the Participating TO's Interconnection Handbook. The Interconnection Customer shall comply with the Participating TO's Interconnection Handbook.
- 5.11 Participating TO's Interconnection Facilities Construction. The Participating TO's Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Upon request, within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Participating TO and Interconnection Customer agree on another mutually acceptable deadline, the Participating TO shall deliver to the Interconnection Customer and the CAISO the following "as-built" drawings, information and documents for the Participating TO's Interconnection Facilities [include appropriate drawings and relay diagrams].

The Participating TO will obtain control for operating and maintenance purposes of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades upon completion

of such facilities. Pursuant to Article 5.2, the CAISO will obtain Operational Control of the Stand Alone Network Upgrades prior to the Commercial Operation Date.

- 5.12 Access Rights. Upon reasonable notice and supervision by a Party, and subject to any required or necessary regulatory approvals, a Party ("Granting Party") shall furnish at no cost to the other Party ("Access Party") any rights of use, licenses, rights of way and easements with respect to lands owned or controlled by the Granting Party, its agents (if allowed under the applicable agency agreement), or any Affiliate, that are necessary to enable the Access Party to obtain ingress and egress to construct, operate, maintain, repair, test (or witness testing), inspect, replace or remove facilities and equipment to: (i) interconnect the Large Generating Facility with the Participating TO's Transmission System; (ii) operate and maintain the Large Generating Facility, the Interconnection Facilities and the Participating TO's Transmission System; and (iii) disconnect or remove the Access Party's facilities and equipment upon termination of this LGIA. In exercising such licenses, rights of way and easements, the Access Party shall not unreasonably disrupt or interfere with normal operation of the Granting Party's business and shall adhere to the safety rules and procedures established in advance, as may be changed from time to time, by the Granting Party and provided to the Access Party.
- 5.13 Lands of Other Property Owners. If any part of the Participating TO's Interconnection Facilities and/or Network Upgrades are to be installed on property owned by persons other than the Interconnection Customer or Participating TO, the Participating TO shall at the Interconnection Customer's expense use efforts, similar in nature and extent to those that it typically undertakes on its own behalf or on behalf of its Affiliates, including use of its eminent domain authority, and to the extent consistent with state law, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove the Participating TO's Interconnection Facilities and/or Network Upgrades upon such property.
- **5.14 Permits.** Participating TO and Interconnection Customer shall cooperate with each other in good faith in obtaining all permits, licenses and authorization that are necessary to accomplish the interconnection in compliance with Applicable Laws and Regulations. With respect to this paragraph, the Participating TO shall provide permitting assistance to the Interconnection Customer comparable to that provided to the Participating TO's own, or an Affiliate's generation.
- 5.15 Early Construction of Base Case Facilities. The Interconnection Customer may request the Participating TO to construct, and the Participating TO shall construct, using Reasonable Efforts to accommodate Interconnection Customer's In-Service Date, all or any portion of any Network Upgrades required for Interconnection Customer to be interconnected to the Participating TO's Transmission System which are included in the Base Case of the Interconnection Studies for the Interconnection Customer, and which also are required to be constructed for another interconnection customer, but where such construction is not scheduled to be completed in time to achieve Interconnection Customer's In-Service Date.
- 5.16 Suspension. The Interconnection Customer reserves the right, upon written notice to the Participating TO and the CAISO, to suspend at any time all work associated with the construction and installation of the Participating TO's Interconnection Facilities, Network Upgrades, and/or Distribution Upgrades required under this LGIA, other than Network Upgrades identified in the Phase II Interconnection Study as common to multiple Generating Facilities, with the condition that the Participating TO's electrical system and the CAISO Controlled Grid shall be left in a safe and reliable condition in accordance with Good Utility Practice and the Participating TO's safety and reliability criteria and the CAISO's Applicable Reliability Standards. In such event, the Interconnection Customer shall be responsible for all reasonable and necessary costs which the Participating TO (i) has incurred pursuant to this LGIA prior to the suspension and (ii) incurs in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Participating TO's electric system during such suspension and, if applicable, any costs incurred in connection with the

cancellation or suspension of material, equipment and labor contracts which the Participating TO cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, the Participating TO shall obtain Interconnection Customer's authorization to do so.

The Participating TO shall invoice the Interconnection Customer for such costs pursuant to Article 12 and shall use due diligence to minimize its costs. In the event Interconnection Customer suspends work required under this LGIA pursuant to this Article 5.16, and has not requested the Participating TO to recommence the work or has not itself recommenced work required under this LGIA in time to ensure that the new projected Commercial Operation Date for the full Generating Facility Capacity of the Large Generating Facility is no more than three (3) years from the Commercial Operation Date identified in Appendix B hereto, this LGIA shall be deemed terminated and the Interconnection Customer's responsibility for costs will be determined in accordance with Section 2.4 of this LGIA. The suspension period shall begin on the date the suspension is requested, or the date of the written notice to the Participating TO and the CAISO, if no effective date is specified.

5.17 Taxes.

- 5.17.1 Interconnection Customer Payments Not Taxable. The Parties intend that all payments or property transfers made by the Interconnection Customer to the Participating TO for the installation of the Participating TO's Interconnection Facilities and the Network Upgrades shall be non-taxable, either as contributions to capital, or as a refundable advance, in accordance with the Internal Revenue Code and any applicable state income tax laws and shall not be taxable as contributions in aid of construction or otherwise under the Internal Revenue Code and any applicable state income tax laws.
- 5.17.2 Representations And Covenants. In accordance with IRS Notice 2001-82 and IRS Notice 88-129, the Interconnection Customer represents and covenants that (i) ownership of the electricity generated at the Large Generating Facility will pass to another party prior to the transmission of the electricity on the CAISO Controlled Grid, (ii) for income tax purposes, the amount of any payments and the cost of any property transferred to the Participating TO for the Participating TO's Interconnection Facilities will be capitalized by the Interconnection Customer as an intangible asset and recovered using the straight-line method over a useful life of twenty (20) years, and (iii) any portion of the Participating TO's Interconnection Facilities that is a "dual-use intertie," within the meaning of IRS Notice 88-129, is reasonably expected to carry only a de minimis amount of electricity in the direction of the Large Generating Facility. For this purpose, "de minimis amount" means no more than 5 percent of the total power flows in both directions, calculated in accordance with the "5 percent test" set forth in IRS Notice 88-129. This is not intended to be an exclusive list of the relevant conditions that must be met to conform to IRS requirements for non-taxable treatment.

At the Participating TO's request, the Interconnection Customer shall provide the Participating TO with a report from an independent engineer confirming its representation in clause (iii), above. The Participating TO represents and covenants that the cost of the Participating TO's Interconnection Facilities paid for by the Interconnection Customer without the possibility of refund or credit will have no net effect on the base upon which rates are determined.

5.17.3 Indemnification for the Cost Consequence of Current Tax Liability Imposed Upon the Participating TO. Notwithstanding Article 5.17.1, the Interconnection Customer shall protect, indemnify and hold harmless the Participating TO from the cost consequences of any current tax liability imposed against the Participating TO as the result of payments or property transfers made by the Interconnection Customer to the Participating TO under

this LGIA for Interconnection Facilities, as well as any interest and penalties, other than interest and penalties attributable to any delay caused by the Participating TO.

The Participating TO shall not include a gross-up for the cost consequences of any current tax liability in the amounts it charges the Interconnection Customer under this LGIA unless (i) the Participating TO has determined, in good faith, that the payments or property transfers made by the Interconnection Customer to the Participating TO should be reported as income subject to taxation or (ii) any Governmental Authority directs the Participating TO to report payments or property as income subject to taxation; provided, however, that the Participating TO may require the Interconnection Customer to provide security for Interconnection Facilities, in a form reasonably acceptable to the Participating TO (such as a parental guarantee or a letter of credit), in an amount equal to the cost consequences of any current tax liability under this Article 5.17. The Interconnection Customer shall reimburse the Participating TO for such costs on a fully grossed-up basis, in accordance with Article 5.17.4, within thirty (30) Calendar Days of receiving written notification from the Participating TO of the amount due, including detail about how the amount was calculated.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten year testing period and the applicable statute of limitation, as it may be extended by the Participating TO upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event and the payment of any related indemnification obligations as contemplated by this Article 5.17.

5.17.4 Tax Gross-Up Amount. The Interconnection Customer's liability for the cost consequences of any current tax liability under this Article 5.17 shall be calculated on a fully grossed-up basis. Except as may otherwise be agreed to by the parties, this means that the Interconnection Customer will pay the Participating TO, in addition to the amount paid for the Interconnection Facilities and Network Upgrades, an amount equal to (1) the current taxes imposed on the Participating TO ("Current Taxes") on the excess of (a) the gross income realized by the Participating TO as a result of payments or property transfers made by the Interconnection Customer to the Participating TO under this LGIA (without regard to any payments under this Article 5.17) (the "Gross Income Amount") over (b) the present value of future tax deductions for depreciation that will be available as a result of such payments or property transfers (the "Present Value Depreciation Amount"), plus (2) an additional amount sufficient to permit the Participating TO to receive and retain, after the payment of all Current Taxes, an amount equal to the net amount described in clause (1).

For this purpose, (i) Current Taxes shall be computed based on the Participating TO's composite federal and state tax rates at the time the payments or property transfers are received and the Participating TO will be treated as being subject to tax at the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting the Participating TO's anticipated tax depreciation deductions as a result of such payments or property transfers by the Participating TO's current weighted average cost of capital. Thus, the formula for calculating the Interconnection Customer's liability to the Participating TO pursuant to this Article 5.17.4 can be expressed as follows: (Current Tax Rate x (Gross Income Amount – Present Value of Tax Depreciation))/(1-Current Tax Rate). Interconnection Customer's estimated tax liability in the event taxes are imposed shall be stated in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades.

5.17.5 Private Letter Ruling or Change or Clarification of Law. At the Interconnection Customer's request and expense, the Participating TO shall file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by the Interconnection Customer to the Participating TO under this LGIA are subject to

federal income taxation. The Interconnection Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of the Interconnection Customer's knowledge. The Participating TO and Interconnection Customer shall cooperate in good faith with respect to the submission of such request, provided, however, the Interconnection Customer and the Participating TO explicitly acknowledge (and nothing herein is intended to alter) Participating TO's obligation under law to certify that the facts presented in the ruling request are true, correct and complete.

The Participating TO shall keep the Interconnection Customer fully informed of the status of such request for a private letter ruling and shall execute either a privacy act waiver or a limited power of attorney, in a form acceptable to the IRS, that authorizes the Interconnection Customer to participate in all discussions with the IRS regarding such request for a private letter ruling. The Participating TO shall allow the Interconnection Customer to attend all meetings with IRS officials about the request and shall permit the Interconnection Customer to prepare the initial drafts of any follow-up letters in connection with the request.

- 5.17.6 Subsequent Taxable Events. If, within 10 years from the date on which the relevant Participating TO's Interconnection Facilities are placed in service, (i) the Interconnection Customer Breaches the covenants contained in Article 5.17.2, (ii) a "disqualification event" occurs within the meaning of IRS Notice 88-129, or (iii) this LGIA terminates and the Participating TO retains ownership of the Interconnection Facilities and Network Upgrades, the Interconnection Customer shall pay a tax gross-up for the cost consequences of any current tax liability imposed on the Participating TO, calculated using the methodology described in Article 5.17.4 and in accordance with IRS Notice 90-60.
- **5.17.7 Contests.** In the event any Governmental Authority determines that the Participating TO's receipt of payments or property constitutes income that is subject to taxation, the Participating TO shall notify the Interconnection Customer, in writing, within thirty (30) Calendar Days of receiving notification of such determination by a Governmental Authority. Upon the timely written request by the Interconnection Customer and at the Interconnection Customer's sole expense, the Participating TO may appeal, protest, seek abatement of, or otherwise oppose such determination. Upon the Interconnection Customer's written request and sole expense, the Participating TO may file a claim for refund with respect to any taxes paid under this Article 5.17, whether or not it has received such a determination. The Participating TO reserve the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the selection of counsel and compromise or settlement of the claim, but the Participating TO shall keep the Interconnection Customer informed, shall consider in good faith suggestions from the Interconnection Customer about the conduct of the contest, and shall reasonably permit the Interconnection Customer or an Interconnection Customer representative to attend contest proceedings.

The Interconnection Customer shall pay to the Participating TO on a periodic basis, as invoiced by the Participating TO, the Participating TO's documented reasonable costs of prosecuting such appeal, protest, abatement or other contest, including any costs associated with obtaining the opinion of independent tax counsel described in this Article 5.17.7. The Participating TO may abandon any contest if the Interconnection Customer fails to provide payment to the Participating TO within thirty (30) Calendar Days of receiving such invoice.

At any time during the contest, the Participating TO may agree to a settlement either with the Interconnection Customer's consent or, if such consent is refused, after obtaining written advice from independent nationally-recognized tax counsel, selected by the

Participating TO, but reasonably acceptable to the Interconnection Customer, that the proposed settlement represents a reasonable settlement given the hazards of litigation. The Interconnection Customer's obligation shall be based on the amount of the settlement agreed to by the Interconnection Customer, or if a higher amount, so much of the settlement that is supported by the written advice from nationally-recognized tax counsel selected under the terms of the preceding paragraph. The settlement amount shall be calculated on a fully grossed-up basis to cover any related cost consequences of the current tax liability. The Participating TO may also settle any tax controversy without receiving the Interconnection Customer's consent or any such written advice; however, any such settlement will relieve the Interconnection Customer from any obligation to indemnify the Participating TO for the tax at issue in the contest (unless the failure to obtain written advice is attributable to the Interconnection Customer's unreasonable refusal to the appointment of independent tax counsel).

- 5.17.8 Refund. In the event that (a) a private letter ruling is issued to the Participating TO which holds that any amount paid or the value of any property transferred by the Interconnection Customer to the Participating TO under the terms of this LGIA is not subject to federal income taxation, (b) any legislative change or administrative announcement, notice, ruling or other determination makes it reasonably clear to the Participating TO in good faith that any amount paid or the value of any property transferred by the Interconnection Customer to the Participating TO under the terms of this LGIA is not taxable to the Participating TO, (c) any abatement, appeal, protest, or other contest results in a determination that any payments or transfers made by the Interconnection Customer to the Participating TO are not subject to federal income tax, or (d) if the Participating TO receives a refund from any taxing authority for any overpayment of tax attributable to any payment or property transfer made by the Interconnection Customer to the Participating TO pursuant to this LGIA, the Participating TO shall promptly refund to the Interconnection Customer the following:
 - (i) any payment made by Interconnection Customer under this Article 5.17 for taxes that is attributable to the amount determined to be non-taxable, together with interest thereon.
 - (ii) interest on any amounts paid by the Interconnection Customer to the Participating TO for such taxes which the Participating TO did not submit to the taxing authority, calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date payment was made by the Interconnection Customer to the date the Participating TO refunds such payment to the Interconnection Customer, and
 - (iii) with respect to any such taxes paid by the Participating TO, any refund or credit the Participating TO receives or to which it may be entitled from any Governmental Authority, interest (or that portion thereof attributable to the payment described in clause (i), above) owed to the Participating TO for such overpayment of taxes (including any reduction in interest otherwise payable by the Participating TO to any Governmental Authority resulting from an offset or credit); provided, however, that the Participating TO will remit such amount promptly to the Interconnection Customer only after and to the extent that the Participating TO has received a tax refund, credit or offset from any Governmental Authority for any applicable overpayment of income tax related to the Participating TO's Interconnection Facilities.

The intent of this provision is to leave the Parties, to the extent practicable, in the event that no taxes are due with respect to any payment for Interconnection Facilities and Network Upgrades hereunder, in the same position they would have been in had no such tax payments been made.

- **5.17.9 Taxes Other Than Income Taxes.** Upon the timely request by the Interconnection Customer, and at the Interconnection Customer's sole expense, the CAISO or Participating TO may appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against the CAISO or Participating TO for which the Interconnection Customer may be required to reimburse the CAISO or Participating TO under the terms of this LGIA. The Interconnection Customer shall pay to the Participating TO on a periodic basis, as invoiced by the Participating TO, the Participating TO's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. The Interconnection Customer, the CAISO, and the Participating TO shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by the Interconnection Customer to the CAISO or Participating TO for such taxes until they are assessed by a final, nonappealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, the Interconnection Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by the Participating TO.
- **Tax Status.** Each Party shall cooperate with the others to maintain the other Parties' tax status. Nothing in this LGIA is intended to adversely affect the CAISO's or any Participating TO's tax exempt status with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds.

5.19 Modification.

5.19.1 General. The Interconnection Customer or the Participating TO may undertake modifications to its facilities, subject to the provisions of this LGIA and the CAISO Tariff. If a Party plans to undertake a modification that reasonably may be expected to affect the other Parties' facilities, that Party shall provide to the other Parties sufficient information regarding such modification so that the other Parties may evaluate the potential impact of such modification prior to commencement of the work. Such information shall be deemed to be confidential hereunder and shall include information concerning the timing of such modifications and whether such modifications are expected to interrupt the flow of electricity from the Large Generating Facility. The Party desiring to perform such work shall provide the relevant drawings, plans, and specifications to the other Parties at least ninety (90) Calendar Days in advance of the commencement of the work or such shorter period upon which the Parties may agree, which agreement shall not unreasonably be withheld, conditioned or delayed.

In the case of Large Generating Facility modifications that do not require the Interconnection Customer to submit an Interconnection Request, the CAISO or Participating TO shall provide, within thirty (30) Calendar Days (or such other time as the Parties may agree), an estimate of any additional modifications to the CAISO Controlled Grid, Participating TO's Interconnection Facilities, Network Upgrades or Distribution Upgrades necessitated by such Interconnection Customer modification and a good faith estimate of the costs thereof. The Participating TO and the CAISO shall determine if a Large Generating Facility modification is a Material Modification in accordance with the GIP.

- **5.19.2 Standards.** Any additions, modifications, or replacements made to a Party's facilities shall be designed, constructed and operated in accordance with this LGIA and Good Utility Practice.
- **5.19.3 Modification Costs.** The Interconnection Customer shall not be directly assigned the costs of any additions, modifications, or replacements that the Participating TO makes to

the Participating TO's Interconnection Facilities or the Participating TO's Transmission System to facilitate the interconnection of a third party to the Participating TO's Interconnection Facilities or the Participating TO's Transmission System, or to provide transmission service to a third party under the CAISO Tariff. The Interconnection Customer shall be responsible for the costs of any additions, modifications, or replacements to the Interconnection Facilities that may be necessary to maintain or upgrade such Interconnection Facilities consistent with Applicable Laws and Regulations, Applicable Reliability Standards or Good Utility Practice.

Article 6. Testing And Inspection

- Operation Date, the Participating TO shall test the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades and the Interconnection Customer shall test the Large Generating Facility and the Interconnection Customer's Interconnection Facilities to ensure their safe and reliable operation. Similar testing may be required after initial operation. Each Party shall make any modifications to its facilities that are found to be necessary as a result of such testing. The Interconnection Customer shall bear the cost of all such testing and modifications. The Interconnection Customer shall not commence initial parallel operation of an Electric Generating Unit with the Participating TO's Transmission System until the Participating TO provides prior written approval, which approval shall not be unreasonably withheld, for operation of such Electric Generating Unit. The Interconnection Customer shall generate test energy at the Large Generating Facility only if it has arranged for the delivery of such test energy.
- 6.2 Post-Commercial Operation Date Testing and Modifications. Each Party shall at its own expense perform routine inspection and testing of its facilities and equipment in accordance with Good Utility Practice as may be necessary to ensure the continued interconnection of the Large Generating Facility with the Participating TO's Transmission System in a safe and reliable manner. Each Party shall have the right, upon advance written notice, to require reasonable additional testing of the other Party's facilities, at the requesting Party's expense, as may be in accordance with Good Utility Practice.
- **Right to Observe Testing.** Each Party shall notify the other Parties at least fourteen (14) Calendar Days in advance of its performance of tests of its Interconnection Facilities or Generating Facility. The other Parties have the right, at their own expense, to observe such testing.
- Right to Inspect. Each Party shall have the right, but shall have no obligation to: (i) observe another Party's tests and/or inspection of any of its System Protection Facilities and other protective equipment, including Power System Stabilizers; (ii) review the settings of another Party's System Protection Facilities and other protective equipment; and (iii) review another Party's maintenance records relative to the Interconnection Facilities, the System Protection Facilities and other protective equipment. A Party may exercise these rights from time to time as it deems necessary upon reasonable notice to the other Party. The exercise or non-exercise by a Party of any such rights shall not be construed as an endorsement or confirmation of any element or condition of the Interconnection Facilities or the System Protection Facilities or other protective equipment or the operation thereof, or as a warranty as to the fitness, safety, desirability, or reliability of same. Any information that a Party obtains through the exercise of any of its rights under this Article 6.4 shall be deemed to be Confidential Information and treated pursuant to Article 22 of this LGIA.

Article 7. Metering

7.1 General. Each Party shall comply with any Applicable Reliability Standards and the Applicable Reliability Council requirements. The Interconnection Customer and CAISO shall comply with the provisions of the CAISO Tariff regarding metering, including Section 10 of the CAISO Tariff. Unless otherwise agreed by the Participating TO and the Interconnection Customer, the

Participating TO may install additional Metering Equipment at the Point of Interconnection prior to any operation of any Electric Generating Unit and shall own, operate, test and maintain such Metering Equipment. Power flows to and from the Large Generating Facility shall be measured at or, at the CAISO's or Participating TO's option for its respective Metering Equipment, compensated to, the Point of Interconnection. The CAISO shall provide metering quantities to the Interconnection Customer upon request in accordance with the CAISO Tariff by directly polling the CAISO's meter data acquisition system. The Interconnection Customer shall bear all reasonable documented costs associated with the purchase, installation, operation, testing and maintenance of the Metering Equipment.

- 7.2 Check Meters. The Interconnection Customer, at its option and expense, may install and operate, on its premises and on its side of the Point of Interconnection, one or more check meters to check the CAISO-polled meters or the Participating TO's meters. Such check meters shall be for check purposes only and shall not be used for the measurement of power flows for purposes of this LGIA, except in the case that no other means are available on a temporary basis at the option of the CAISO or the Participating TO. The check meters shall be subject at all reasonable times to inspection and examination by the CAISO or Participating TO or their designees. The installation, operation and maintenance thereof shall be performed entirely by the Interconnection Customer in accordance with Good Utility Practice.
- **7.3 Participating TO Retail Metering.** The Participating TO may install retail revenue quality meters and associated equipment, pursuant to the Participating TO's applicable retail tariffs.

Article 8. Communications

- 8.1 Interconnection Customer Obligations. The Interconnection Customer shall maintain satisfactory operating communications with the CAISO in accordance with the provisions of the CAISO Tariff and with the Participating TO's dispatcher or representative designated by the Participating TO. The Interconnection Customer shall provide standard voice line, dedicated voice line and facsimile communications at its Large Generating Facility control room or central dispatch facility through use of either the public telephone system, or a voice communications system that does not rely on the public telephone system. The Interconnection Customer shall also provide the dedicated data circuit(s) necessary to provide Interconnection Customer data to the CAISO and Participating TO as set forth in Appendix D, Security Arrangements Details. The data circuit(s) shall extend from the Large Generating Facility to the location(s) specified by the CAISO and Participating TO. Any required maintenance of such communications equipment shall be performed by the Interconnection Customer. Operational communications shall be activated and maintained under, but not be limited to, the following events: system paralleling or separation, scheduled and unscheduled shutdowns, equipment clearances, and hourly and daily load data.
- **8.2** Remote Terminal Unit. Prior to the Initial Synchronization Date of each Electric Generating Unit, a Remote Terminal Unit, or equivalent data collection and transfer equipment acceptable to the Parties, shall be installed by the Interconnection Customer, or by the Participating TO at the Interconnection Customer's expense, to gather accumulated and instantaneous data to be telemetered to the location(s) designated by the CAISO and by the Participating TO through use of a dedicated point-to-point data circuit(s) as indicated in Article 8.1.

Telemetry to the CAISO shall be provided in accordance with the CAISO's technical standards for direct telemetry. For telemetry to the Participating TO, the communication protocol for the data circuit(s) shall be specified by the Participating TO. Instantaneous bi-directional real power and reactive power flow and any other required information must be telemetered directly to the location(s) specified by the Participating TO.

Each Party will promptly advise the other Parties if it detects or otherwise learns of any metering, telemetry or communications equipment errors or malfunctions that require the attention and/or

- correction by another Party. The Party owning such equipment shall correct such error or malfunction as soon as reasonably feasible.
- **8.3 No Annexation.** Any and all equipment placed on the premises of a Party shall be and remain the property of the Party providing such equipment regardless of the mode and manner of annexation or attachment to real property, unless otherwise mutually agreed by the Parties.

Article 9. Operations

- **9.1 General.** Each Party shall comply with Applicable Reliability Standards and the Applicable Reliability Council requirements. Each Party shall provide to the other Party all information that may reasonably be required by the other Party to comply with Applicable Laws and Regulations and Applicable Reliability Standards.
- 9.2 Balancing Authority Area Notification. At least three months before Initial Synchronization Date, the Interconnection Customer shall notify the CAISO and Participating TO in writing of the Balancing Authority Area in which the Large Generating Facility intends to be located. If the Interconnection Customer intends to locate the Large Generating Facility in a Balancing Authority Area other than the Balancing Authority Area within whose electrically metered boundaries the Large Generating Facility is located, and if permitted to do so by the relevant transmission tariffs, all necessary arrangements, including but not limited to those set forth in Article 7 and Article 8 of this LGIA, and remote Balancing Authority Area generator interchange agreements, if applicable, and the appropriate measures under such agreements, shall be executed and implemented prior to the placement of the Large Generating Facility in the other Balancing Authority Area.
- 9.3 CAISO and Participating TO Obligations. The CAISO and Participating TO shall cause the Participating TO's Transmission System to be operated and controlled in a safe and reliable manner and in accordance with this LGIA. The Participating TO at the Interconnection Customer's expense shall cause the Participating TO's Interconnection Facilities to be operated, maintained and controlled in a safe and reliable manner and in accordance with this LGIA. The CAISO and Participating TO may provide operating instructions to the Interconnection Customer consistent with this LGIA and Participating TO and CAISO operating protocols and procedures as they may change from time to time. The Participating TO and CAISO will consider changes to their operating protocols and procedures proposed by the Interconnection Customer.
- 9.4 Interconnection Customer Obligations. The Interconnection Customer shall at its own expense operate, maintain and control the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA. The Interconnection Customer shall operate the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in accordance with all applicable requirements of the Balancing Authority Area of which it is part, including such requirements as set forth in Appendix C, Interconnection Details, of this LGIA. Appendix C, Interconnection Details, will be modified to reflect changes to the requirements as they may change from time to time. A Party may request that another Party provide copies of the requirements set forth in Appendix C, Interconnection Details, of this LGIA. The Interconnection Customer shall not commence Commercial Operation of an Electric Generating Unit with the Participating TO's Transmission System until the Participating TO provides prior written approval, which approval shall not be unreasonably withheld, for operation of such Electric Generating Unit.
- **9.5 Start-Up and Synchronization.** Consistent with the Parties' mutually acceptable procedures, the Interconnection Customer is responsible for the proper synchronization of each Electric Generating Unit to the CAISO Controlled Grid.
- 9.6 Reactive Power.
 - **9.6.1 Power Factor Design Criteria.** The Interconnection Customer shall design the Large Generating Facility to maintain a composite power delivery at continuous rated power

output at the terminals of the Electric Generating Unit at a power factor within the range of 0.95 leading to 0.90 lagging, unless the CAISO has established different requirements that apply to all generators in the Balancing Authority Area on a comparable basis. Power factor design criteria for wind generators are provided in Appendix H of this LGIA.

- Voltage Schedules. Once the Interconnection Customer has synchronized an Electric 9.6.2 Generating Unit with the CAISO Controlled Grid, the CAISO or Participating TO shall require the Interconnection Customer to maintain a voltage schedule by operating the Electric Generating Unit to produce or absorb reactive power within the design limitations of the Electric Generating Unit set forth in Article 9.6.1 (Power Factor Design Criteria). CAISO's voltage schedules shall treat all sources of reactive power in the Balancing Authority Area in an equitable and not unduly discriminatory manner. The Participating TO shall exercise Reasonable Efforts to provide the Interconnection Customer with such schedules at least one (1) day in advance, and the CAISO or Participating TO may make changes to such schedules as necessary to maintain the reliability of the CAISO Controlled Grid or the Participating TO's electric system. The Interconnection Customer shall operate the Electric Generating Unit to maintain the specified output voltage or power factor within the design limitations of the Electric Generating Unit set forth in Article 9.6.1 (Power Factor Design Criteria), and as may be required by the CAISO to operate the Electric Generating Unit at a specific voltage schedule within the design limitations set forth in Article 9.6.1. If the Interconnection Customer is unable to maintain the specified voltage or power factor, it shall promptly notify the CAISO and the Participating
 - 9.6.2.1 Governors and Regulators. Whenever an Electric Generating Unit is operated in parallel with the CAISO Controlled Grid and the speed governors (if installed on the Electric Generating Unit pursuant to Good Utility Practice) and voltage regulators are capable of operation, the Interconnection Customer shall operate the Electric Generating Unit with its speed governors and voltage regulators in automatic operation. If the Electric Generating Unit's speed governors and voltage regulators are not capable of such automatic operation, the Interconnection Customer shall immediately notify the CAISO and the Participating TO and ensure that the Electric Generating Unit operates as specified in Article 9.6.2 through manual operation and that such Electric Generating Unit's reactive power production or absorption (measured in MVARs) are within the design capability of the Electric Generating Unit(s) and steady state stability limits. The Interconnection Customer shall restore the speed governors and voltage regulators to automatic operation as soon as possible. If the Large Generating Facility's speed governors and voltage regulators are improperly tuned or malfunctioning, the CAISO shall have the right to order the reduction in output or disconnection of the Large Generating Facility if the reliability of the CAISO Controlled Grid would be adversely affected. The Interconnection Customer shall not cause its Large Generating Facility to disconnect automatically or instantaneously from the CAISO Controlled Grid or trip any Electric Generating Unit comprising the Large Generating Facility for an under or over frequency condition unless the abnormal frequency condition persists for a time period beyond the limits set forth in ANSI/IEEE Standard C37.106, or such other standard as applied to other generators in the Balancing Authority Area on a comparable basis.
- 9.6.3 Payment for Reactive Power. CAISO is required to pay the Interconnection Customer for reactive power that Interconnection Customer provides or absorbs from an Electric Generating Unit when the CAISO requests the Interconnection Customer to operate its Electric Generating Unit outside the range specified in Article 9.6.1, provided that if the CAISO pays other generators for reactive power service within the specified range, it must also pay the Interconnection Customer. Payments shall be pursuant to Article 11.6

or such other agreement to which the CAISO and Interconnection Customer have otherwise agreed.

9.7 Outages and Interruptions.

9.7.1 Outages.

- 9.7.1.1 Outage Authority and Coordination. Each Party may in accordance with Good Utility Practice in coordination with the other Parties remove from service any of its respective Interconnection Facilities or Network Upgrades that may impact another Party's facilities as necessary to perform maintenance or testing or to install or replace equipment. Absent an Emergency Condition, the Party scheduling a removal of such facility(ies) from service will use Reasonable Efforts to schedule such removal on a date and time mutually acceptable to all Parties. In all circumstances any Party planning to remove such facility(ies) from service shall use Reasonable Efforts to minimize the effect on the other Parties of such removal.
- 9.7.1.2 Outage Schedules. The CAISO shall post scheduled outages of CAISO Controlled Grid facilities in accordance with the provisions of the CAISO Tariff. The Interconnection Customer shall submit its planned maintenance schedules for the Large Generating Facility to the CAISO in accordance with the CAISO Tariff. The Interconnection Customer shall update its planned maintenance schedules in accordance with the CAISO Tariff. The CAISO may request the Interconnection Customer to reschedule its maintenance as necessary to maintain the reliability of the CAISO Controlled Grid in accordance with the CAISO Tariff. Such planned maintenance schedules and updates and changes to such schedules shall be provided by the Interconnection Customer to the Participating TO concurrently with their submittal to the CAISO. The CAISO shall compensate the Interconnection Customer for any additional direct costs that the Interconnection Customer incurs as a result of having to reschedule maintenance in accordance with the CAISO Tariff. The Interconnection Customer will not be eligible to receive compensation, if during the twelve (12) months prior to the date of the scheduled maintenance, the Interconnection Customer had modified its schedule of maintenance activities.
- 9.7.1.3 Outage Restoration. If an outage on a Party's Interconnection Facilities or Network Upgrades adversely affects another Party's operations or facilities, the Party that owns or controls the facility that is out of service shall use Reasonable Efforts to promptly restore such facility(ies) to a normal operating condition consistent with the nature of the outage. The Party that owns or controls the facility that is out of service shall provide the other Parties, to the extent such information is known, information on the nature of the Emergency Condition, if the outage is caused by an Emergency Condition, an estimated time of restoration, and any corrective actions required. Initial verbal notice shall be followed up as soon as practicable with written notice explaining the nature of the outage, if requested by a Party, which may be provided by e-mail or facsimile.
- 9.7.2 Interruption of Service. If required by Good Utility Practice to do so, the CAISO or the Participating TO may require the Interconnection Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect the CAISO's or the Participating TO's ability to perform such activities as are necessary to safely and reliably operate and maintain the Participating TO's electric system or the CAISO Controlled Grid. The following provisions shall apply to any interruption or reduction permitted under this Article 9.7.2:

- **9.7.2.1** The interruption or reduction shall continue only for so long as reasonably necessary under Good Utility Practice:
- 9.7.2.2 Any such interruption or reduction shall be made on an equitable, non-discriminatory basis with respect to all generating facilities directly connected to the CAISO Controlled Grid, subject to any conditions specified in this LGIA;
- 9.7.2.3 When the interruption or reduction must be made under circumstances which do not allow for advance notice, the CAISO or Participating TO, as applicable, shall notify the Interconnection Customer by telephone as soon as practicable of the reasons for the curtailment, interruption, or reduction, and, if known, its expected duration. Telephone notification shall be followed by written notification, if requested by the Interconnection Customer, as soon as practicable;
- 9.7.2.4 Except during the existence of an Emergency Condition, the CAISO or Participating TO shall notify the Interconnection Customer in advance regarding the timing of such interruption or reduction and further notify the Interconnection Customer of the expected duration. The CAISO or Participating TO shall coordinate with the Interconnection Customer using Good Utility Practice to schedule the interruption or reduction during periods of least impact to the Interconnection Customer, the CAISO, and the Participating TO;
- 9.7.2.5 The Parties shall cooperate and coordinate with each other to the extent necessary in order to restore the Large Generating Facility, Interconnection Facilities, the Participating TO's Transmission System, and the CAISO Controlled Grid to their normal operating state, consistent with system conditions and Good Utility Practice.
- 9.7.3 Under-Frequency and Over Frequency Conditions. The CAISO Controlled Grid is designed to automatically activate a load-shed program as required by Applicable Reliability Standards and the Applicable Reliability Council in the event of an under-frequency system disturbance. The Interconnection Customer shall implement under-frequency and over-frequency protection set points for the Large Generating Facility as required by Applicable Reliability Standards and the Applicable Reliability Council to ensure "ride through" capability. Large Generating Facility response to frequency deviations of pre-determined magnitudes, both under-frequency and over-frequency deviations, shall be studied and coordinated with the Participating TO and CAISO in accordance with Good Utility Practice. The term "ride through" as used herein shall mean the ability of a Generating Facility to stay connected to and synchronized with the CAISO Controlled Grid during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice.
- 9.7.4 System Protection and Other Control Requirements.
 - 9.7.4.1 System Protection Facilities. The Interconnection Customer shall, at its expense, install, operate and maintain System Protection Facilities as a part of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. The Participating TO shall install at the Interconnection Customer's expense any System Protection Facilities that may be required on the Participating TO's Interconnection Facilities or the Participating TO's Transmission System as a result of the interconnection of the Large Generating Facility and the Interconnection Customer's Interconnection Facilities.
 - **9.7.4.2** The Participating TO's and Interconnection Customer's protection facilities shall be designed and coordinated with other systems in accordance with Applicable

- Reliability Standards, Applicable Reliability Council criteria, and Good Utility Practice.
- **9.7.4.3** The Participating TO and Interconnection Customer shall each be responsible for protection of its facilities consistent with Good Utility Practice.
- 9.7.4.4 The Participating TO's and Interconnection Customer's protective relay design shall incorporate the necessary test switches to perform the tests required in Article 6. The required test switches will be placed such that they allow operation of lockout relays while preventing breaker failure schemes from operating and causing unnecessary breaker operations and/or the tripping of the Interconnection Customer's Electric Generating Units.
- 9.7.4.5 The Participating TO and Interconnection Customer will test, operate and maintain System Protection Facilities in accordance with Good Utility Practice and, if applicable, the requirements of the Participating TO's Interconnection Handbook.
- 9.7.4.6 Prior to the in-service date, and again prior to the Commercial Operation Date, the Participating TO and Interconnection Customer or their agents shall perform a complete calibration test and functional trip test of the System Protection Facilities. At intervals suggested by Good Utility Practice, the standards and procedures of the Participating TO, including, if applicable, the requirements of the Participating TO's Interconnection Handbook, and following any apparent malfunction of the System Protection Facilities, each Party shall perform both calibration and functional trip tests of its System Protection Facilities. These tests do not require the tripping of any in-service generation unit. These tests do, however, require that all protective relays and lockout contacts be activated.
- 9.7.5 Requirements for Protection. In compliance with Good Utility Practice and, if applicable, the requirements of the Participating TO's Interconnection Handbook, the Interconnection Customer shall provide, install, own, and maintain relays, circuit breakers and all other devices necessary to remove any fault contribution of the Large Generating Facility to any short circuit occurring on the Participating TO's Transmission System not otherwise isolated by the Participating TO's equipment, such that the removal of the fault contribution shall be coordinated with the protective requirements of the Participating TO's Transmission System. Such protective equipment shall include, without limitation, a disconnecting device with fault current-interrupting capability located between the Large Generating Facility and the Participating TO's Transmission System at a site selected upon mutual agreement (not to be unreasonably withheld, conditioned or delayed) of the Parties. The Interconnection Customer shall be responsible for protection of the Large Generating Facility and the Interconnection Customer's other equipment from such conditions as negative sequence currents, over- or under-frequency, sudden load rejection, over- or under-voltage, and generator loss-of-field. The Interconnection Customer shall be solely responsible to disconnect the Large Generating Facility and the Interconnection Customer's other equipment if conditions on the CAISO Controlled Grid could adversely affect the Large Generating Facility.
- 9.7.6 Power Quality. Neither the Participating TO's nor the Interconnection Customer's facilities shall cause excessive voltage flicker nor introduce excessive distortion to the sinusoidal voltage or current waves as defined by ANSI Standard C84.1-1989, in accordance with IEEE Standard 519, any applicable superseding electric industry standard, or any alternative Applicable Reliability Standard or Applicable Reliability Council standard. In the event of a conflict among ANSI Standard C84.1-1989, any applicable superseding electric industry standard, or any alternative Applicable Reliability

Standard or Applicable Reliability Council standard, the alternative Applicable Reliability Standard or Applicable Reliability Council standard shall control.

- 9.8 Switching and Tagging Rules. Each Party shall provide the other Parties a copy of its switching and tagging rules that are applicable to the other Parties' activities. Such switching and tagging rules shall be developed on a non-discriminatory basis. The Parties shall comply with applicable switching and tagging rules, as amended from time to time, in obtaining clearances for work or for switching operations on equipment.
- 9.9 Use of Interconnection Facilities by Third Parties.
 - **9.9.1 Purpose of Interconnection Facilities.** Except as may be required by Applicable Laws and Regulations, or as otherwise agreed to among the Parties, the Interconnection Facilities shall be constructed for the sole purpose of interconnecting the Large Generating Facility to the Participating TO's Transmission System and shall be used for no other purpose.
 - 9.9.2 Third Party Users. If required by Applicable Laws and Regulations or if the Parties mutually agree, such agreement not to be unreasonably withheld, to allow one or more third parties to use the Participating TO's Interconnection Facilities, or any part thereof, the Interconnection Customer will be entitled to compensation for the capital expenses it incurred in connection with the Interconnection Facilities based upon the pro rata use of the Interconnection Facilities by the Participating TO, all third party users, and the Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually-agreed upon methodology. In addition, cost responsibility for ongoing costs, including operation and maintenance costs associated with the Interconnection Facilities, will be allocated between the Interconnection Customer and any third party users based upon the pro rata use of the Interconnection Facilities by the Participating TO, all third party users, and the Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually agreed upon methodology. If the issue of such compensation or allocation cannot be resolved through such negotiations, it shall be submitted to FERC for resolution.
- **9.10 Disturbance Analysis Data Exchange.** The Parties will cooperate with one another in the analysis of disturbances to either the Large Generating Facility or the CAISO Controlled Grid by gathering and providing access to any information relating to any disturbance, including information from oscillography, protective relay targets, breaker operations and sequence of events records, and any disturbance information required by Good Utility Practice.

Article 10. Maintenance

- **10.1 Participating TO Obligations.** The Participating TO shall maintain the Participating TO's Transmission System and the Participating TO's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA.
- **10.2 Interconnection Customer Obligations.** The Interconnection Customer shall maintain the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA.
- **10.3 Coordination.** The Parties shall confer regularly to coordinate the planning, scheduling and performance of preventive and corrective maintenance on the Large Generating Facility and the Interconnection Facilities.
- **10.4 Secondary Systems.** The Participating TO and Interconnection Customer shall cooperate with the other Parties in the inspection, maintenance, and testing of control or power circuits that operate below 600 volts, AC or DC, including, but not limited to, any hardware, control or protective devices, cables, conductors, electric raceways, secondary equipment panels,

transducers, batteries, chargers, and voltage and current transformers that directly affect the operation of a Party's facilities and equipment which may reasonably be expected to impact the other Parties. Each Party shall provide advance notice to the other Parties before undertaking any work on such circuits, especially on electrical circuits involving circuit breaker trip and close contacts, current transformers, or potential transformers.

10.5 Operating and Maintenance Expenses. Subject to the provisions herein addressing the use of facilities by others, and except for operations and maintenance expenses associated with modifications made for providing interconnection or transmission service to a third party and such third party pays for such expenses, the Interconnection Customer shall be responsible for all reasonable expenses including overheads, associated with: (1) owning, operating, maintaining, repairing, and replacing the Interconnection Customer's Interconnection Facilities; and (2) operation, maintenance, repair and replacement of the Participating TO's Interconnection Facilities.

Article 11. Performance Obligation

- 11.1 Interconnection Customer's Interconnection Facilities. The Interconnection Customer shall design, procure, construct, install, own and/or control the Interconnection Customer's Interconnection Facilities described in Appendix A at its sole expense.
- **11.2** Participating TO's Interconnection Facilities. The Participating TO shall design, procure, construct, install, own and/or control the Participating TO's Interconnection Facilities described in Appendix A at the sole expense of the Interconnection Customer. Unless the Participating TO elects to fund the capital for the Participating TO's Interconnection Facilities, they shall be solely funded by the Interconnection Customer.
- 11.3 Network Upgrades and Distribution Upgrades. The Participating TO shall design, procure, construct, install, and own the Network Upgrades and Distribution Upgrades described in Appendix A. The Interconnection Customer shall be responsible for all costs related to Distribution Upgrades. Unless the Participating TO elects to fund the capital for the Distribution Upgrades and Network Upgrades, they shall be funded by the Interconnection Customer, which, for Interconnection Customers processed under the Section 6 of the GIP (in queue clusters), shall be in an amount determined pursuant to the methodology set forth in Section 6.5 of the GIP. This specific amount is set forth in Appendix G to this LGIA.
- 11.4 Transmission Credits. No later than thirty (30) Calendar Days prior to the Commercial Operation Date, the Interconnection Customer may make a one-time election by written notice to the CAISO and the Participating TO to receive Congestion Revenue Rights as defined in and as available under the CAISO Tariff at the time of the election in accordance with the CAISO Tariff, in lieu of a refund of the cost of Network Upgrades in accordance with Article 11.4.1.
 - 11.4.1 Repayment of Amounts Advanced for Network Upgrades. Upon the Commercial Operation Date, the Interconnection Customer shall be entitled to a repayment, equal to the total amount paid to the Participating TO for the costs of Network Upgrades for which it is responsible, as set forth in Appendix G. Such amount shall include any tax gross-up or other tax-related payments associated with Network Upgrades not refunded to the Interconnection Customer pursuant to Article 5.17.8 or otherwise, and shall be paid to the Interconnection Customer by the Participating TO on a dollar-for-dollar basis either through (1) direct payments made on a levelized basis over the five-year period commencing on the Commercial Operation Date; or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years from the Commercial Operation Date. Notwithstanding the foregoing, if this LGIA terminates within five (5) years from the Commercial Operation Date, the Participating TO's obligation to pay refunds to the Interconnection Customer shall cease as of the date of termination. Any repayment shall

include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment. Interest shall continue to accrue on the repayment obligation so long as this LGIA is in effect. The Interconnection Customer may assign such repayment rights to any person.

If the Large Generating Facility fails to achieve Commercial Operation, but it or another Generating Facility is later constructed and makes use of the Network Upgrades, the Participating TO shall at that time reimburse Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the Generating Facility, if different, is responsible for identifying and demonstrating to the Participating TO the appropriate entity to which reimbursement must be made in order to implement the intent of this reimbursement obligation.

- 11.4.2 Special Provisions for Affected Systems. The Interconnection Customer shall enter into an agreement with the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid, as applicable, in accordance with the GIP. Such agreement shall specify the terms governing payments to be made by the Interconnection Customer to the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid as well as the repayment by the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid. In no event shall the Participating TO be responsible for the repayment for any facilities that are not part of the Participating TO's Transmission System. In the event the Participating TO is a joint owner with an Affected System or with any other co-owner of a facility affected by the Large Generating Facility, the Participating TO's obligation to reimburse the Interconnection Customer for payments made to address the impacts of the Large Generating Facility on the system shall not exceed the proportionate amount of the cost of any upgrades attributable to the proportion of the jointly-owned facility owned by the Participating TO.
- 11.4.3 Notwithstanding any other provision of this LGIA, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, Congestion Revenue Rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements, merchant transmission Congestion Revenue Rights in accordance with Section 36.11 of the CAISO Tariff, or transmission credits for transmission service that is not associated with the Large Generating Facility.
- 11.5 Provision of Interconnection Financial Security. The Interconnection Customer is obligated to provide all necessary Interconnection Financial Security required under Section 9 of the GIP in a manner acceptable under Section 9 of the GIP. Failure by the Interconnection Customer to timely satisfy the GIP's requirements for the provision of Interconnection Financial Security shall be deemed a breach of this Agreement and a condition of Default of this Agreement.
 - 11.5.1 Notwithstanding any other provision in this Agreement for notice of Default and opportunity to cure such Default, the CAISO or the Participating TO shall provide Interconnection Customer with written notice of any Default due to timely failure to post Financial Security, and the Interconnection Customer shall have five (5) Business Days from the date of such notice to cure such Default by posting the required Financial Security. If the Interconnection Customer fails to cure the Default, then this Agreement shall be deemed terminated.

- **11.6** Interconnection Customer Compensation. If the CAISO requests or directs the Interconnection Customer to provide a service pursuant to Articles 9.6.3 (Payment for Reactive Power) or 13.5.1 of this LGIA, the CAISO shall compensate the Interconnection Customer in accordance with the CAISO Tariff.
 - 11.6.1 Interconnection Customer Compensation for Actions During Emergency Condition. The CAISO shall compensate the Interconnection Customer in accordance with the CAISO Tariff for its provision of real and reactive power and other Emergency Condition services that the Interconnection Customer provides to support the CAISO Controlled Grid during an Emergency Condition in accordance with Article 11.6.

Article 12. Invoice

- 12.1 General. The Participating TO shall submit to the Interconnection Customer, on a monthly basis, invoices of amounts due pursuant to this LGIA for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party under this LGIA, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party. Notwithstanding the foregoing, any invoices between the CAISO and another Party shall be submitted and paid in accordance with the CAISO Tariff.
- 12.2 Final Invoice. As soon as reasonably practicable, but within twelve months after completion of the construction of the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, the Participating TO shall provide an invoice of the final cost of the construction of the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, and shall set forth such costs in sufficient detail to enable the Interconnection Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates. With respect to costs associated with the Participating TO's Interconnection Facilities and Distribution Upgrades, the Participating TO shall refund to the Interconnection Customer any amount by which the actual payment by the Interconnection Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice; or, in the event the actual costs of construction exceed the Interconnection Customer's actual payment for estimated costs, then the Interconnection Customer shall pay to the Participating TO any amount by which the actual costs of construction exceed the actual payment by the Interconnection Customer for estimated costs within thirty (30) Calendar Days of the issuance of such final construction invoice. With respect to costs associated with Network Upgrades, the Participating TO shall refund to the Interconnection Customer any amount by which the actual payment by the Interconnection Customer for estimated costs exceeds the actual costs of construction multiplied by the Interconnection Customer's percentage share of those costs, as set forth in Appendix G to this LGIA within thirty (30) Calendar Days of the issuance of such final construction invoice. In the event the actual costs of construction multiplied by the Interconnection Customer's percentage share of those costs exceed the Interconnection Customer's actual payment for estimated costs, then the Participating TO shall recover such difference through its transmission service rates.
- 12.3 Payment. Invoices shall be rendered to the Interconnection Customer at the address specified in Appendix F. The Interconnection Customer shall pay, or Participating TO shall refund, the amounts due within thirty (30) Calendar Days of the Interconnection Customer's receipt of the invoice. All payments shall be made in immediately available funds payable to the Interconnection Customer or Participating TO, or by wire transfer to a bank named and account designated by the invoicing Interconnection Customer or Participating TO. Payment of invoices by any Party will not constitute a waiver of any rights or claims any Party may have under this LGIA.

12.4 Disputes. In the event of a billing dispute between the Interconnection Customer and the Participating TO, the Participating TO and the CAISO shall continue to provide Interconnection Service under this LGIA as long as the Interconnection Customer: (i) continues to make all payments not in dispute; and (ii) pays to the Participating TO or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If the Interconnection Customer fails to meet these two requirements for continuation of service, then the Participating TO may provide notice to the Interconnection Customer of a Default pursuant to Article 17. Within thirty (30) Calendar Days after the resolution of the dispute, the Party that owes money to the other Party shall pay the amount due with interest calculated in accordance with the methodology set forth in FERC's Regulations at 18 C.F.R. § 35.19a(a)(2)(iii). Notwithstanding the foregoing, any billing dispute between the CAISO and another Party shall be resolved in accordance with the provisions of Article 27 of this LGIA.

Article 13. Emergencies

- 13.1 [Reserved]
- **13.2 Obligations.** Each Party shall comply with the Emergency Condition procedures of the CAISO, NERC, the Applicable Reliability Council, Applicable Reliability Standards, Applicable Laws and Regulations, and any emergency procedures set forth in this LGIA.
- 13.3 **Notice.** The Participating TO or the CAISO shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that affects the Participating TO's Interconnection Facilities or Distribution System or the CAISO Controlled Grid, respectively, that may reasonably be expected to affect the Interconnection Customer's operation of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. The Interconnection Customer shall notify the Participating TO and the CAISO promptly when it becomes aware of an Emergency Condition that affects the Large Generating Facility or the Interconnection Customer's Interconnection Facilities that may reasonably be expected to affect the CAISO Controlled Grid or the Participating TO's Interconnection Facilities. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of the Interconnection Customer's or Participating TO's facilities and operations, its anticipated duration and the corrective action taken and/or to be taken. The initial notice shall be followed as soon as practicable with written notice, if requested by a Party, which may be provided by electronic mail or facsimile, or in the case of the CAISO may be publicly posted on the CAISO's internet web site.
- **13.4 Immediate Action.** Unless, in the Interconnection Customer's reasonable judgment, immediate action is required, the Interconnection Customer shall obtain the consent of the CAISO and the Participating TO, such consent to not be unreasonably withheld, prior to performing any manual switching operations at the Large Generating Facility or the Interconnection Customer's Interconnection Facilities in response to an Emergency Condition declared by the Participating TO or CAISO or in response to any other emergency condition.
- 13.5 CAISO and Participating TO Authority.
 - 13.5.1 General. The CAISO and Participating TO may take whatever actions or inactions, including issuance of dispatch instructions, with regard to the CAISO Controlled Grid or the Participating TO's Interconnection Facilities or Distribution System they deem necessary during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the CAISO Controlled Grid or the Participating TO's Interconnection Facilities or Distribution System, and (iii) limit or prevent damage, and (iv) expedite restoration of service.

The Participating TO and the CAISO shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. The Participating TO or the CAISO may, on the

basis of technical considerations, require the Large Generating Facility to mitigate an Emergency Condition by taking actions necessary and limited in scope to remedy the Emergency Condition, including, but not limited to, directing the Interconnection Customer to shut-down, start-up, increase or decrease the real or reactive power output of the Large Generating Facility; implementing a reduction or disconnection pursuant to Article 13.5.2; directing the Interconnection Customer to assist with black start (if available) or restoration efforts; or altering the outage schedules of the Large Generating Facility and the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall comply with all of the CAISO's and Participating TO's operating instructions concerning Large Generating Facility real power and reactive power output within the manufacturer's design limitations of the Large Generating Facility's equipment that is in service and physically available for operation at the time, in compliance with Applicable Laws and Regulations.

- 13.5.2 Reduction and Disconnection. The Participating TO or the CAISO may reduce Interconnection Service or disconnect the Large Generating Facility or the Interconnection Customer's Interconnection Facilities when such reduction or disconnection is necessary under Good Utility Practice due to Emergency Conditions. These rights are separate and distinct from any right of curtailment of the CAISO pursuant to the CAISO Tariff. When the CAISO or Participating TO can schedule the reduction or disconnection in advance, the CAISO or Participating TO shall notify the Interconnection Customer of the reasons, timing and expected duration of the reduction or disconnection. The CAISO or Participating TO shall coordinate with the Interconnection Customer using Good Utility Practice to schedule the reduction or disconnection during periods of least impact to the Interconnection Customer and the CAISO and Participating TO. Any reduction or disconnection shall continue only for so long as reasonably necessary under Good Utility Practice. The Parties shall cooperate with each other to restore the Large Generating Facility, the Interconnection Facilities. and the CAISO Controlled Grid to their normal operating state as soon as practicable consistent with Good Utility Practice.
- 13.6 Interconnection Customer Authority. Consistent with Good Utility Practice, this LGIA, and the CAISO Tariff, the Interconnection Customer may take actions or inactions with regard to the Large Generating Facility or the Interconnection Customer's Interconnection Facilities during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service. Interconnection Customer shall use Reasonable Efforts to minimize the effect of such actions or inactions on the CAISO Controlled Grid and the Participating TO's Interconnection Facilities. The CAISO and Participating TO shall use Reasonable Efforts to assist Interconnection Customer in such actions.
- **13.7 Limited Liability.** Except as otherwise provided in Article 11.6.1 of this LGIA, no Party shall be liable to any other Party for any action it takes in responding to an Emergency Condition so long as such action is made in good faith and is consistent with Good Utility Practice.

Article 14. Regulatory Requirements And Governing Law

14.1 Regulatory Requirements. Each Party's obligations under this LGIA shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the applying Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek and use its Reasonable Efforts to obtain such other approvals. Nothing in this LGIA shall require the Interconnection Customer to take any action that could result in its inability to obtain, or its loss of, status or exemption under the Federal Power Act or the Public Utility Holding Company Act of 1935, as amended, or the Public Utility Regulatory Policies Act of 1978, or the Energy Policy Act of 2005.

14.2 Governing Law.

- **14.2.1** The validity, interpretation and performance of this LGIA and each of its provisions shall be governed by the laws of the state where the Point of Interconnection is located, without regard to its conflicts of law principles.
- **14.2.2** This LGIA is subject to all Applicable Laws and Regulations.
- **14.2.3** Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, rules, or regulations of a Governmental Authority.

Article 15. Notices

15.1 General. Unless otherwise provided in this LGIA, any notice, demand or request required or permitted to be given by a Party to another and any instrument required or permitted to be tendered or delivered by a Party in writing to another shall be effective when delivered and may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered mail, addressed to the Party, or personally delivered to the Party, at the address set out in Appendix F, Addresses for Delivery of Notices and Billings.

A Party must update the information in Appendix F as information changes. A Party may change the notice information in this LGIA by giving five (5) Business Days written notice prior to the effective date of the change. Such changes shall not constitute an amendment to this LGIA.

- **15.2 Billings and Payments.** Billings and payments shall be sent to the addresses set out in Appendix F.
- **15.3 Alternative Forms of Notice.** Any notice or request required or permitted to be given by a Party to another and not required by this LGIA to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out in Appendix F.
- **Operations and Maintenance Notice.** Each Party shall notify the other Parties in writing of the identity of the person(s) that it designates as the point(s) of contact with respect to the implementation of Articles 9 and 10.

Article 16. Force Majeure

- 16.1 Force Majeure.
 - **16.1.1** Economic hardship is not considered a Force Majeure event.
 - 16.1.2 No Party shall be considered to be in Default with respect to any obligation hereunder, (including obligations under Article 4), other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other Party in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this Article shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall exercise due diligence to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

Article 17. Default

17.1 Default.

- 17.1.1 General. No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this LGIA or the result of an act or omission of the other Party. Upon a Breach, the affected non-Breaching Party(ies) shall give written notice of such Breach to the Breaching Party. Except as provided in Article 17.1.2, and in Article 11.5.1, the Breaching Party shall have thirty (30) Calendar Days from receipt of the Default notice within which to cure such Breach; provided however, if such Breach is not capable of cure within thirty (30) Calendar Days, the Breaching Party shall commence such cure within thirty (30) Calendar Days after notice and continuously and diligently complete such cure within ninety (90) Calendar Days from receipt of the Default notice; and, if cured within such time, the Breach specified in such notice shall cease to exist.
- 17.1.2 Right to Terminate. If a Breach is not cured as provided in this Article, or if a Breach is not capable of being cured within the period provided for herein, the affected non-Breaching Party(ies) shall have the right to declare a Default and terminate this LGIA by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not such Party(ies) terminates this LGIA, to recover from the Breaching Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this Article will survive termination of this LGIA.

Article 18. Indemnity, Consequential Damages And Insurance

- **18.1 Indemnity.** Each Party shall at all times indemnify, defend, and hold the other Parties harmless from, any and all Losses arising out of or resulting from another Party's action or inactions of its obligations under this LGIA on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the Indemnified Party.
 - **18.1.1 Indemnified Party.** If an Indemnified Party is entitled to indemnification under this Article 18 as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 18.1, to assume the defense of such claim, such Indemnified Party may at the expense of the Indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.
 - **18.1.2 Indemnifying Party.** If an Indemnifying Party is obligated to indemnify and hold any Indemnified Party harmless under this Article 18, the amount owing to the Indemnified Party shall be the amount of such Indemnified Party's actual Loss, net of any insurance or other recovery.
 - **18.1.3** Indemnity Procedures. Promptly after receipt by an Indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 18.1 may apply, the Indemnified Party shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Party. If the defendants in any such action include one or more Indemnified Parties and the Indemnifying Party and if the Indemnified Party reasonably concludes that there may be legal defenses available to it and/or other Indemnified Parties which are different from or additional to those available to the Indemnifying Party, the Indemnified Party shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional

attorney to represent an Indemnified Party or Indemnified Parties having such differing or additional legal defenses.

The Indemnified Party shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Party and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Party, or there exists a conflict or adversity of interest between the Indemnified Party and the Indemnifying Party, in such event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Party, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Party, which shall not be unreasonably withheld, conditioned or delayed.

- 18.2 Consequential Damages. Other than the liquidated damages heretofore described in Article 5.3, in no event shall any Party be liable under any provision of this LGIA for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to another Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.
- **18.3 Insurance.** Each Party shall, at its own expense, maintain in force throughout the period of this LGIA, and until released by the other Parties, the following minimum insurance coverages, with insurers rated no less than A- (with a minimum size rating of VII) by Bests' Insurance Guide and Key Ratings and authorized to do business in the state where the Point of Interconnection is located, except in the case of the CAISO, the State of California:
 - **18.3.1** Employer's Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located, except in the case of the CAISO, the State of California.
 - 18.3.2 Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate combined single limit for personal injury, bodily injury, including death and property damage.
 - 18.3.3 Business Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage.
 - 18.3.4 Excess Public Liability Insurance over and above the Employer's Liability Commercial General Liability and Business Automobile Liability Insurance coverage, with a minimum combined single limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.
 - **18.3.5** The Commercial General Liability Insurance, Business Automobile Insurance and Excess Public Liability Insurance policies shall name the other Parties, their parents,

associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this LGIA against the Other Party Group and provide thirty (30) Calendar Days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition.

- 18.3.6 The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Public Liability Insurance policies shall contain provisions that specify that the policies are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Party shall be responsible for its respective deductibles or retentions.
- 18.3.7 The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Public Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this LGIA, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed by the Parties.
- 18.3.8 The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this LGIA.
- 18.3.9 Within ten (10) Calendar Days following execution of this LGIA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) Calendar Days thereafter, each Party shall provide certification of all insurance required in this LGIA, executed by each insurer or by an authorized representative of each insurer.
- 18.3.10 Notwithstanding the foregoing, each Party may self-insure to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program; provided that, such Party's senior unsecured debt or issuer rating is BBB-, or better, as rated by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior unsecured debt rating and issuer rating are both unrated by Standard & Poor's or are both rated at less than BBB- by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9. In the event that a Party is permitted to self-insure pursuant to this Article 18.3.10, it shall notify the other Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.
- **18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this LGIA.

Article 19. Assignment

19.1 Assignment. This LGIA may be assigned by a Party only with the written consent of the other Parties; provided that a Party may assign this LGIA without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this LGIA; and provided further that the Interconnection Customer shall have the right to assign this LGIA, without the consent of the CAISO or Participating TO, for collateral security purposes to aid in

providing financing for the Large Generating Facility, provided that the Interconnection Customer will promptly notify the CAISO and Participating TO of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the CAISO and Participating TO of the date and particulars of any such exercise of assignment right(s), including providing the CAISO and Participating TO with proof that it meets the requirements of Articles 11.5 and 18.3. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this LGIA shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

Article 20. Severability

20.1 Severability. If any provision in this LGIA is finally determined to be invalid, void or unenforceable by any court or other Governmental Authority having jurisdiction, such determination shall not invalidate, void or make unenforceable any other provision, agreement or covenant of this LGIA; provided that if the Interconnection Customer (or any third party, but only if such third party is not acting at the direction of the Participating TO or CAISO) seeks and obtains such a final determination with respect to any provision of the Alternate Option (Article 5.1.2), or the Negotiated Option (Article 5.1.4), then none of the provisions of Article 5.1.2 or 5.1.4 shall thereafter have any force or effect and the Parties' rights and obligations shall be governed solely by the Standard Option (Article 5.1.1).

Article 21. Comparability

21.1 Comparability. The Parties will comply with all applicable comparability and code of conduct laws, rules and regulations, as amended from time to time.

Article 22. Confidentiality

22.1 Confidentiality. Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by any of the Parties to the other Parties prior to the execution of this LGIA.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Parties receiving the information that the information is confidential.

If requested by any Party, the other Parties shall provide in writing, the basis for asserting that the information referred to in this Article 22 warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

- **22.1.1 Term.** During the term of this LGIA, and for a period of three (3) years after the expiration or termination of this LGIA, except as otherwise provided in this Article 22, each Party shall hold in confidence and shall not disclose to any person Confidential Information.
- **22.1.2 Scope.** Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes,

publicly known, through no wrongful act or omission of the receiving Party or Breach of this LGIA; or (6) is required, in accordance with Article 22.1.7 of this LGIA, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this LGIA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

- 22.1.3 Release of Confidential Information. No Party shall release or disclose Confidential Information to any other person, except to its employees, consultants, Affiliates (limited by the Standards of Conduct requirements set forth in Part 358 of FERC's Regulations, 18 C.F.R. 358), subcontractors, or to parties who may be or considering providing financing to or equity participation with the Interconnection Customer, or to potential purchasers or assignees of the Interconnection Customer, on a need-to-know basis in connection with this LGIA, unless such person has first been advised of the confidentiality provisions of this Article 22 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 22.
- **22.1.4 Rights.** Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Parties. The disclosure by each Party to the other Parties of Confidential Information shall not be deemed a waiver by a Party or any other person or entity of the right to protect the Confidential Information from public disclosure.
- **22.1.5 No Warranties.** The mere fact that a Party has provided Confidential Information does not constitute a warranty or representation as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to the other Parties nor to enter into any further agreements or proceed with any other relationship or joint venture.
- **22.1.6 Standard of Care.** Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under this LGIA or its regulatory requirements.
- 22.1.7 Order of Disclosure. If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Parties with prompt notice of such request(s) or requirement(s) so that the other Parties may seek an appropriate protective order or waive compliance with the terms of this LGIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.
- **22.1.8 Termination of Agreement.** Upon termination of this LGIA for any reason, each Party shall, within ten (10) Calendar Days of receipt of a written request from another Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the other Party) or return to the other Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the other Party.

- 22.1.9 Remedies. The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this Article 22. Each Party accordingly agrees that the other Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Article 22, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 22, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 22.
- 22.1.10 Disclosure to FERC, its Staff, or a State. Notwithstanding anything in this Article 22 to the contrary, and pursuant to 18 C.F.R. section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this LGIA, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. section 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this LGIA prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other Parties to the LGIA when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.
- 22.1.11 Subject to the exception in Article 22.1.10, Confidential Information shall not be disclosed by the other Parties to any person not employed or retained by the other Parties, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute: (iii) otherwise permitted by consent of the other Parties, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this LGIA or as a transmission service provider or a Balancing Authority including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. The Party asserting confidentiality shall notify the other Parties in writing of the information it claims is confidential. Prior to any disclosures of another Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

Article 23. Environmental Releases

23.1 Each Party shall notify the other Parties, first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Large Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Parties. The notifying Party shall: (i) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than twenty-four hours after such Party becomes aware of the occurrence; and (ii)

promptly furnish to the other Parties copies of any publicly available reports filed with any Governmental Authorities addressing such events.

Article 24. Information Requirements

- **24.1 Information Acquisition.** The Participating TO and the Interconnection Customer shall submit specific information regarding the electrical characteristics of their respective facilities to each other as described below and in accordance with Applicable Reliability Standards.
- 24.2 Information Submission by Participating TO. The initial information submission by the Participating TO shall occur no later than one hundred eighty (180) Calendar Days prior to Trial Operation and shall include the Participating TO's Transmission System information necessary to allow the Interconnection Customer to select equipment and meet any system protection and stability requirements, unless otherwise agreed to by the Participating TO and the Interconnection Customer. On a monthly basis the Participating TO shall provide the Interconnection Customer and the CAISO a status report on the construction and installation of the Participating TO's Interconnection Facilities and Network Upgrades, including, but not limited to, the following information: (1) progress to date; (2) a description of the activities since the last report; (3) a description of the action items for the next period; and (4) the delivery status of equipment ordered.
- 24.3 Updated Information Submission by Interconnection Customer. The updated information submission by the Interconnection Customer, including manufacturer information, shall occur no later than one hundred eighty (180) Calendar Days prior to the Trial Operation. The Interconnection Customer shall submit a completed copy of the Electric Generating Unit data requirements contained in Appendix 1 to the GIP. It shall also include any additional information provided to the Participating TO and the CAISO for the Interconnection Studies. Information in this submission shall be the most current Electric Generating Unit design or expected performance data. Information submitted for stability models shall be compatible with the Participating TO and CAISO standard models. If there is no compatible model, the Interconnection Customer will work with a consultant mutually agreed to by the Parties to develop and supply a standard model and associated information.

If the Interconnection Customer's data is materially different from what was originally provided to the Participating TO and the CAISO for the Interconnection Studies, then the Participating TO and the CAISO will conduct appropriate studies pursuant to the GIP to determine the impact on the Participating TO's Transmission System and affected portions of the CAISO Controlled Grid based on the actual data submitted pursuant to this Article 24.3. The Interconnection Customer shall not begin Trial Operation until such studies are completed and all other requirements of this LGIA are satisfied.

24.4 Information Supplementation. Prior to the Trial Operation date, the Parties shall supplement their information submissions described above in this Article 24 with any and all "as-built" Electric Generating Unit information or "as-tested" performance information that differs from the initial submissions or, alternatively, written confirmation that no such differences exist. The Interconnection Customer shall conduct tests on the Electric Generating Unit as required by Good Utility Practice such as an open circuit "step voltage" test on the Electric Generating Unit to verify proper operation of the Electric Generating Unit's automatic voltage regulator.

Unless otherwise agreed, the test conditions shall include: (1) Electric Generating Unit at synchronous speed; (2) automatic voltage regulator on and in voltage control mode; and (3) a five percent (5 percent) change in Electric Generating Unit terminal voltage initiated by a change in the voltage regulators reference voltage. The Interconnection Customer shall provide validated test recordings showing the responses of Electric Generating Unit terminal and field voltages. In the event that direct recordings of these voltages is impractical, recordings of other voltages or currents that mirror the response of the Electric Generating Unit's terminal or field voltage are acceptable if information necessary to translate these alternate quantities to actual Electric

Generating Unit terminal or field voltages is provided. Electric Generating Unit testing shall be conducted and results provided to the Participating TO and the CAISO for each individual Electric Generating Unit in a station.

Subsequent to the Commercial Operation Date, the Interconnection Customer shall provide the Participating TO and the CAISO any information changes due to equipment replacement, repair, or adjustment. The Participating TO shall provide the Interconnection Customer any information changes due to equipment replacement, repair or adjustment in the directly connected substation or any adjacent Participating TO-owned substation that may affect the Interconnection Customer's Interconnection Facilities equipment ratings, protection or operating requirements. The Parties shall provide such information pursuant to Article 5.19.

Article 25. Information Access And Audit Rights

- 25.1 Information Access. Each Party (the "disclosing Party") shall make available to the other Party information that is in the possession of the disclosing Party and is necessary in order for the other Party to: (i) verify the costs incurred by the disclosing Party for which the other Party is responsible under this LGIA; and (ii) carry out its obligations and responsibilities under this LGIA. The Parties shall not use such information for purposes other than those set forth in this Article 25.1 and to enforce their rights under this LGIA. Nothing in this Article 25 shall obligate the CAISO to make available to a Party any third party information in its possession or control if making such third party information available would violate a CAISO Tariff restriction on the use or disclosure of such third party information.
- 25.2 Reporting of Non-Force Majeure Events. Each Party (the "notifying Party") shall notify the other Parties when the notifying Party becomes aware of its inability to comply with the provisions of this LGIA for a reason other than a Force Majeure event. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this Article shall not entitle the Party receiving such notification to allege a cause for anticipatory breach of this LGIA.
- **25.3 Audit Rights.** Subject to the requirements of confidentiality under Article 22 of this LGIA, the Parties' audit rights shall include audits of a Party's costs pertaining to such Party's performance or satisfaction of obligations owed to the other Party under this LGIA, calculation of invoiced amounts, the CAISO's efforts to allocate responsibility for the provision of reactive support to the CAISO Controlled Grid, the CAISO's efforts to allocate responsibility for interruption or reduction of generation on the CAISO Controlled Grid, and each such Party's actions in an Emergency Condition.
 - 25.3.1 The Interconnection Customer and the Participating TO shall each have the right, during normal business hours, and upon prior reasonable notice to the other Party, to audit at its own expense the other Party's accounts and records pertaining to either such Party's performance or either such Party's satisfaction of obligations owed to the other Party under this LGIA. Subject to Article 25.3.2, any audit authorized by this Article shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to each such Party's performance and satisfaction of obligations under this LGIA. Each such Party shall keep such accounts and records for a period equivalent to the audit rights periods described in Article 25.4.
 - **25.3.2** Notwithstanding anything to the contrary in Article 25.3, each Party's rights to audit the CAISO's accounts and records shall be as set forth in Section 22.1 of the CAISO Tariff.

25.4 Audit Rights Periods.

- 25.4.1 Audit Rights Period for Construction-Related Accounts and Records. Accounts and records related to the design, engineering, procurement, and construction of Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades constructed by the Participating TO shall be subject to audit for a period of twenty-four months following the Participating TO's issuance of a final invoice in accordance with Article 12.2. Accounts and records related to the design, engineering, procurement, and construction of Participating TO's Interconnection Facilities and/or Stand Alone Network Upgrades constructed by the Interconnection Customer shall be subject to audit and verification by the Participating TO and the CAISO for a period of twenty-four months following the Interconnection Customer's issuance of a final invoice in accordance with Article 5.2(8).
- 25.4.2 Audit Rights Period for All Other Accounts and Records. Accounts and records related to a Party's performance or satisfaction of all obligations under this LGIA other than those described in Article 25.4.1 shall be subject to audit as follows: (i) for an audit relating to cost obligations, the applicable audit rights period shall be twenty-four months after the auditing Party's receipt of an invoice giving rise to such cost obligations; and (ii) for an audit relating to all other obligations, the applicable audit rights period shall be twenty-four months after the event for which the audit is sought; provided that each Party's rights to audit the CAISO's accounts and records shall be as set forth in Section 22.1 of the CAISO Tariff.
- **25.5 Audit Results.** If an audit by the Interconnection Customer or the Participating TO determines that an overpayment or an underpayment has occurred with respect to the other Party, a notice of such overpayment or underpayment shall be given to the other Party together with those records from the audit which supports such determination. The Party that is owed payment shall render an invoice to the other Party and such invoice shall be paid pursuant to Article 12 hereof.
 - 25.5.1 Notwithstanding anything to the contrary in Article 25.5, the Interconnection Customer's and Participating TO's rights to audit the CAISO's accounts and records shall be as set forth in Section 22.1 of the CAISO Tariff, and the CAISO's process for remedying an overpayment or underpayment shall be as set forth in the CAISO Tariff.

Article 26. Subcontractors

- **26.1 General.** Nothing in this LGIA shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this LGIA; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this LGIA in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.
- 26.2 Responsibility of Principal. The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this LGIA. The hiring Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the CAISO or Participating TO be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under Article 5 of this LGIA. Any applicable obligation imposed by this LGIA upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.
- **No Limitation by Insurance.** The obligations under this Article 26 will not be limited in any way by any limitation of subcontractor's insurance.

Article 27. Disputes

All disputes arising out of or in connection with this LGIA whereby relief is sought by or from the CAISO shall be settled in accordance with the provisions of Article 13 of the CAISO Tariff, except that references to the CAISO Tariff in such Article 13 of the CAISO Tariff shall be read as references to this LGIA. Disputes arising out of or in connection with this LGIA not subject to provisions of Article 13 of the CAISO Tariff shall be resolved as follows:

- 27.1 Submission. In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with this LGIA or its performance, such Party (the "disputing Party") shall provide the other Party with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this LGIA.
- 27.2 External Arbitration Procedures. Any arbitration initiated under this LGIA shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) Calendar Days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules") and any applicable FERC regulations; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Article 27, the terms of this Article 27 shall prevail.
- 27.3 Arbitration Decisions. Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of this LGIA and shall have no power to modify or change any provision of this Agreement in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator(s) must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.
- **27.4 Costs.** Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

Article 28. Representations, Warranties And Covenants

28.1 General. Each Party makes the following representations, warranties and covenants:

- **28.1.1 Good Standing.** Such Party is duly organized, validly existing and in good standing under the laws of the state in which it is organized, formed, or incorporated, as applicable; that it is qualified to do business in the state or states in which the Large Generating Facility, Interconnection Facilities and Network Upgrades owned by such Party, as applicable, are located; and that it has the corporate power and authority to own its properties, to carry on its business as now being conducted and to enter into this LGIA and carry out the transactions contemplated hereby and perform and carry out all covenants and obligations on its part to be performed under and pursuant to this LGIA.
- **28.1.2 Authority.** Such Party has the right, power and authority to enter into this LGIA, to become a Party hereto and to perform its obligations hereunder. This LGIA is a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).
- **28.1.3 No Conflict.** The execution, delivery and performance of this LGIA does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Party, or any judgment, license, permit, order, material agreement or instrument applicable to or binding upon such Party or any of its assets.
- **28.1.4 Consent and Approval.** Such Party has sought or obtained, or, in accordance with this LGIA will seek or obtain, each consent, approval, authorization, order, or acceptance by any Governmental Authority in connection with the execution, delivery and performance of this LGIA, and it will provide to any Governmental Authority notice of any actions under this LGIA that are required by Applicable Laws and Regulations.

Article 29. [Reserved]

Article 30. Miscellaneous

- **30.1 Binding Effect.** This LGIA and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- **30.2 Conflicts.** In the event of a conflict between the body of this LGIA and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this LGIA shall prevail and be deemed the final intent of the Parties.
- 30.3 Rules of Interpretation. This LGIA, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this LGIA, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this LGIA), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any Applicable Laws and Regulations means such Applicable Laws and Regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article of this LGIA or such Appendix to this LGIA, or such Section to the GIP or such Appendix to the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references

to this LGIA as a whole and not to any particular Article or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".

- **30.4 Entire Agreement.** This LGIA, including all Appendices and Schedules attached hereto, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between or among the Parties with respect to the subject matter of this LGIA. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this LGIA.
- **30.5 No Third Party Beneficiaries.** This LGIA is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.
- **30.6 Waiver.** The failure of a Party to this LGIA to insist, on any occasion, upon strict performance of any provision of this LGIA will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this LGIA shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this LGIA. Termination or Default of this LGIA for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO. Any waiver of this LGIA shall, if requested, be provided in writing.

- **30.7 Headings.** The descriptive headings of the various Articles of this LGIA have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this LGIA.
- **30.8 Multiple Counterparts.** This LGIA may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- **30.9** Amendment. The Parties may by mutual agreement amend this LGIA by a written instrument duly executed by all of the Parties. Such amendment shall become effective and a part of this LGIA upon satisfaction of all Applicable Laws and Regulations.
- **30.10 Modification by the Parties.** The Parties may by mutual agreement amend the Appendices to this LGIA by a written instrument duly executed by all of the Parties. Such amendment shall become effective and a part of this LGIA upon satisfaction of all Applicable Laws and Regulations.
- **30.11** Reservation of Rights. The CAISO and Participating TO shall each have the right to make a unilateral filing with FERC to modify this LGIA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles and Appendices of this LGIA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these Articles and Appendices:

Recitals, 1, 2.1, 2.2, 2.3, 2.4, 2.6, 3.1, 3.3, 4.1, 4.2, 4.3, 4.4, 5 preamble, 5.4, 5.7, 5.8, 5.9, 5.12, 5.13, 5.18, 5.19.1, 7.1, 7.2, 8, 9.1, 9.2, 9.3, 9.5, 9.6, 9.7, 9.8, 9.10, 10.3, 11.4, 12.1, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24.3, 24.4, 25.1, 25.2, 25.3 (excluding

subparts), 25.4.2, 26, 28, 29, 30, Appendix D, Appendix F, Appendix G, and any other Article not reserved exclusively to the Participating TO or the CAISO below.

The Participating TO shall have the exclusive right to make a unilateral filing with FERC to modify this LGIA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles and Appendices of this LGIA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these Articles and Appendices:

2.5, 5.1, 5.2, 5.3, 5.5, 5.6, 5.10, 5.11, 5.14, 5.15, 5.16, 5.17, 5.19 (excluding 5.19.1), 6, 7.3, 9.4, 9.9, 10.1, 10.2, 10.4, 10.5, 11.1, 11.2, 11.3, 11.5, 12.2, 12.3, 12.4, 24.1, 24.2, 25.3.1, 25.4.1, 25.5 (excluding 25.5.1), 27 (excluding preamble), Appendix A, Appendix B, Appendix C, and Appendix E.

The CAISO shall have the exclusive right to make a unilateral filing with FERC to modify this LGIA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles of this LGIA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these Articles:

3.2, 4.5, 11.6, 25.3.2, 25.5.1, and 27 preamble.

The Interconnection Customer, the CAISO, and the Participating TO shall have the right to make a unilateral filing with FERC to modify this LGIA pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this LGIA shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

- **30.12 No Partnership.** This LGIA shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership among the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.
- **30.13 Joint and Several Obligations.** Except as otherwise provided in this LGIA, the obligations of the CAISO, the Participating TO, and the Interconnection Customer are several, and are neither joint nor joint and several.

IN WITNESS WHEREOF, the Parties have executed this LGIA in multiple originals, each of which shall constitute and be an original effective agreement among the Parties.

[Insert name	e of Interconnection Custon	ner]	
_			
Ву:			
Title:			
Date:			
[Insert name	e of Participating TO]		
Ву:			
Title:			
Date:			
California In	dependent System Operato	or Corporation	
Ву:			
Title:			
Date:			

Appendix A Interconnection Facilities & Network & Distribution Upgrades To LGIA

Interconnection Facilities, Network Upgrades and Distribution Upgrades

	(a) [insert Interconnection Customer's Interconnection Facilities]:
	(b) [insert Participating TO's Interconnection Facilities]:
2. Netw	ork Upgrades:
	(a) [insert Stand Alone Network Upgrades]:
	(b) [insert Other Network Upgrades]:
	(i) [insert Participating TO's Reliability Network Upgrades]
	(ii) [insert Participating TO's Delivery Network Upgrades]

1. Interconnection Facilities:

3. Distribution Upgrades:

Appendix B Milestones

To LGIA

Milestones

Appendix C Interconnection Details

To LGIA

Interconnection Details

Appendix D Security Arrangements Details To LGIA

Security Arrangements Details

Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, all Participating TOs, market participants, and Interconnection Customers interconnected to the CAISO Controlled Grid to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

The Interconnection Customer shall meet the requirements for security implemented pursuant to the CAISO Tariff, including the CAISO's standards for information security posted on the CAISO's internet web site at the following internet address: http://www.caiso.com/pubinfo/info-security/index.html.

Appendix E Commercial Operation Date To LGIA

Commercial Operation Date

[This Appendix E sets forth a form of letter to be provided by the Interconnection Customer to the CAISO and Participating TO to provide formal notice of the Commercial Operation of an Electric Generating Unit.]

	[Date]	
	[CAISO Address]	
	[Participating TO A	(ddress]
	Re:	_ Electric Generating Unit
	Dear	:
On [Date] [Interconnection Customer] has completed Trial Operation of Unit No This le confirms that [Interconnection Customer] commenced Commercial Operation of Unit No at the Electric Generating Unit, effective as of [Date plus one day] and that [Interconnection Customer] provide CAISO's operations personnel advance notice of its intended Commercial Operation Date no less than five Business Days prior to that date.		
	Thank you.	
	[Signature]	
	[Interconnection C	ustomer Representative]

Appendix F Addresses For Delivery Of Notices And Billings To LGIA

Addresses for Delivery of Notices and Billings

otices:				
Participating TO:				
[To be supplied.]				
Interconnection Customer:				
[To be supplied.]				
CAISO				
<u>CAISO:</u>				
[To be supplied.]				
illings and Payments:				
Participating TO:				
[To be supplied.]				
Interconnection Customer:				
[To be supplied.]				
CAISO:				
[To be supplied.]				
Iternative Forms of Delivery of Notices (telephone, facsimile or e-mail):				
Participating TO:				
[To be supplied.]				
Interconnection Customer:				
[To be supplied.]				

CAISO:

[To be supplied.]

Appendix G Customer's Share Of Network Upgrade Costs To LGIA

Interconnection Customer's Proportional Share of Costs of Network Upgrades for Applicable Project Group

Appendix H Interconnection Requirements for a Wind Generating Plant To LGIA

INTERCONNECTION REQUIREMENTS FOR A WIND GENERATING PLANT

Appendix H sets forth requirements and provisions specific to a wind generating plant. All other requirements of this LGIA continue to apply to wind generating plant interconnections.

A. Technical Standards Applicable to a Wind Generating Plant

i. Low Voltage Ride-Through (LVRT) Capability

A wind generating plant shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below.

All wind generating plants subject to FERC Order No. 661 must meet the following requirements:

- 1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the Participating TO. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the CAISO Controlled Grid. A wind generating plant shall remain interconnected during such a fault on the CAISO Controlled Grid for a voltage level as low as zero volts, as measured at the high voltage side of the wind GSU.
- 2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.
- 3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
- 4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAr Compensator) within the wind generating plant or by a combination of generator performance and additional equipment.
- 5. Existing individual generator units that are, or have been, interconnected to the CAISO Controlled Grid at the same location at the effective date of the Appendix H LVRT Standard are exempt from meeting the Appendix H LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Appendix H LVRT Standard.

ii. Power Factor Design Criteria (Reactive Power)

A wind generating plant shall operate within a power factor within the range of 0.95 leading to 0.95 lagging, measured at the Point of Interconnection as defined in this LGIA in order to maintain a specified voltage schedule, if the Phase II Interconnection Study shows that such a requirement is necessary to ensure safety or reliability. The power factor range standard can be met by using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two, if

agreed to by the Participating TO and CAISO. The Interconnection Customer shall not disable power factor equipment while the wind plant is in operation. Wind plants shall also be able to provide sufficient dynamic voltage support in lieu of the power system stabilizer and automatic voltage regulation at the generator excitation system if the Phase II Interconnection Study shows this to be required for system safety or reliability.

iii. Supervisory Control and Data Acquisition (SCADA) Capability

The wind plant shall provide SCADA capability to transmit data and receive instructions from the Participating TO and CAISO to protect system reliability. The Participating TO and CAISO and the wind plant Interconnection Customer shall determine what SCADA information is essential for the proposed wind plant, taking into account the size of the plant and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

* * *

Attachment B – Marked Tariff

Generator Interconnection Procedures Tariff Amendment

California Independent System Operator Corporation

Fifth Replacement FERC Electric Tariff

* *

24.1.2 Reliability Driven Projects

The CAISO, in coordination with each Participating TO with a PTO Service Territory will, as part of the Transmission Planning Process and consistent with the procedures set forth in the Business Practice Manual, identify the need for any transmission additions or upgrades required to ensure System Reliability consistent with all Applicable Reliability Criteria and CAISO Planning Standards. In making this determination, the CAISO, in coordination with each Participating TO with a PTO Service Territory and other Market Participants, shall consider lower cost alternatives to the construction of transmission additions or upgrades, such as acceleration or expansion of existing projects, Demand-side management, Remedial Action Schemes, appropriate Generation, interruptible Loads or reactive support. The CAISO shall direct each Participating TO with a PTO Service Area, as a registered Transmission Planner with NERC, to perform the necessary studies, based on the Unified Planning Assumptions and Study Plan as set forth in Section 24.2.3, any applicable Interconnection Study, and in accordance with the Business Practice Manual, to determine the facilities needed to meet all Applicable Reliability Criteria and CAISO Planning Standards. The Participating TO with a PTO Service Area shall provide the CAISO and other Market Participants with all information relating to the studies performed under this Section, subject to any limitation provided in Section 20.2, or the applicable LGIP set forth in Appendix U, or the GIP set forth in Appendix Y. Based on the study results, and as part of the Transmission Planning Process described in the Business Practice Manual, the CAISO, CEC, CPUC, Project Sponsors and other Market Participants shall be free to propose any transmission upgrades or additions deemed necessary to ensure System Reliability consistent with Applicable Reliability Criteria and CAISO Planning Standards. The Participating TO with a PTO Service Territory in which the transmission upgrade or addition deemed needed under this Section 24.1.2 is to be located shall be the Project Sponsor, with the responsibility to construct, own and finance, and maintain such transmission upgrade or addition.

* * *

24.1.3.2 Demonstration of Interest in a Location Constrained Resource Interconnection Facility A proponent of an LCRIF must demonstrate interest in the LCRIF equal to sixty percent (60%) or more of the capacity of the facility in the following manner:

- the proponent's demonstration must include a showing that LCRIGs that would connect to the facility and would have a combined capacity equal to at least twenty-five percent (25%) of the capacity of the facility have executed Large Generator Interconnection Agreements, or Small Generator Interconnection Agreements, as applicable; and
- (b) to the extent the showing pursuant to Section 24.1.3.2(a) does not constitute sixty percent (60%) of the capacity of the LCRIF, the proponent's demonstration of the remainder of the required minimum level of interest must include a showing that additional LCRIGs:
 - in the case of Large Generating Facilities subject to the LGIP set forth in Appendix Y, have obtained Site Exclusivity or paid the Site Exclusivity Deposit in lieu of Site Exclusivity, provided that any Site Exclusivity Deposit paid pursuant to Section 3.5 of the LGIP set forth in Appendix Y shall satisfy this requirement, or, in the case of Large Generating Facilities subject to the LGIP set forth in Appendix U and Small Generating Facilities subject to the SGIP set forth in Appendix S, have obtained control over their site or paid a deposit to the CAISO in the amount of \$250,000, which deposit shall be refundable if the LCRIF is not approved or is withdrawn by the proponent; and
 - (2) have demonstrated interest in the LCRIF by one of the following methods:
 - executing a firm power sales agreement for the output of the LCRIG for a period of five years or longer; or
 - (ii) in the case of Large Generating Facilities subject to the LGIP set forth in Appendix Y, filing an Interconnection Request and paying the Interconnection Study Deposit required by Section 3.5 of the LGIP set forth in Appendix Y; or

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

* * *

24.2.3 Request Window

All requests for Economic Planning Studies and transmission upgrades or additions must be submitted by Participating TOs, Market Participants, CPUC, CEC, or Project Sponsors through the Request Window, in accordance with Section 24 and the Business Practice Manual, to be considered for inclusion in the annual Transmission Plan. The Request Window will occur in the year prior to the year in which the Transmission Plan is prepared. The duration of the Request Window will be set forth in the Business Practice Manual; provided, however, that the Request Window will not close earlier than six weeks after participating TOs have submitted reliability projects and mitigation solutions that respond to the CAISO technical studies or technical studies conducted at the direction of the CAISO. All proposals submitted through the Request Window must use the forms and satisfy the information and technical requirements set forth in the Business Practice Manual. Proposals for transmission additions or upgrades must be within or connect to the CAISO Balancing Authority Area or CAISO Controlled Grid and proposals for Economic Planning Studies must be intended to promote competition or economic efficiency of serving Load within the CAISO Balancing Authority Area, but may relate to Congestion relief or transmission capacity expansion outside the CAISO Balancing Authority Area. The following proposals will only be considered for inclusion in the Transmission Plan if proposed during the Request Window:

- (a) Economic transmission upgrades or additions proposed under Section 24.1.1;
- (b) Location Constrained Resource Interconnection Facilities under Section 24.1.3 not identified by the CAISO as part of Interconnection Studies performed under the LGIP set forth in Appendix U or the GIP set forth in Appendix Y;
- (c) Demand response programs that are proposed for inclusion in the base case or assumptions for the Transmission Plan or as alternatives to transmission additions or upgrades;
- (d) Generation projects that are proposed as solutions to Congestion identified in previously published Economic Planning Studies, for inclusion in long-term planning studies, or as alternatives to transmission additions or upgrades; and
- (e) Requests for Economic Planning Studies; and
- (f) Reliability-driven projects described in Section 24.1.2.

* * *

25.1 Applicability

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

- (a) each new Generating Unit that seeks to interconnect to the CAISO ControlledGrid;
- (b) each existing Generating Unit connected to the CAISO Controlled Grid that will be modified with a resulting increase in the total capability of the power plant;
- (c) each existing Generating Unit connected to the CAISO Controlled Grid that will be modified without increasing the total capability of the power plant but has changed the electrical characteristics of the power plant such that its reenergization may violate Applicable Reliability Criteria; and
- (d) each existing Qualifying Facility Generating Unit connected to the CAISO Controlled Grid whose total Generation was previously sold to a Participating TO or on-site customer but whose Generation, or any portion thereof, will now be sold in the wholesale market, subject to Section 25.1.2.

25.1.1 Interconnection Request And Generating Unit Requirements

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

* * *

25.1.2 Qualifying Facility Affidavit Requirement

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

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

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

* * *

25.2 Interconnections To The Distribution System

Any proposed interconnection by the owner of a planned Generating Unit, or its designee, to connect that Generating Unit to a Distribution System of a Participating TO will be processed, as applicable, pursuant to the Wholesale Distribution Access Tariff or CPUC Rule 21, or other Local Regulatory Authority requirements, if applicable, of the Participating TO; provided, however, that the owner of the planned Generating Unit, or its designee, shall be required to mitigate any adverse impact on reliability of the

CAISO Controlled Grid consistent with Appendix U (the Standard Large Generator Interconnection Procedures) and Appendix Y (the LGIP-for Interconnection Requests in a Queue Cluster Window). In addition, each Participating TO will provide to the CAISO a copy of the system impact study used to determine the impact of a planned Generating Unit on the Distribution System and the CAISO Controlled Grid pursuant to a request to interconnect under the applicable Wholesale Distribution Access Tariff or CPUC Rule 21, or other Local Regulatory Authority requirements, if applicable.

25.3 Maintenance Of Encumbrances

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

* * *

40.4.6 Reductions For Deliverability 40.4.6.1 Deliverability Within the CAISO Balancing Authority Area

In order to determine Net Qualifying Capacity from Resource Adequacy Resources subject to this Section 40.4, the CAISO will determine that a Resource Adequacy Resource is available to serve the aggregate of Load by means of a deliverability study. Documentation explaining the CAISO's deliverability analysis will be posted on the CAISO Website. The deliverability study will be performed annually and shall focus on peak Demand conditions. The results of the deliverability study shall be incorporated into the Net Qualifying Capacity annual report under Section 40.4.2 and will be effective for the next Resource Adequacy Compliance Year. To the extent the deliverability study shows that the Qualifying Capacity is not deliverable to the aggregate of Demand under the conditions studied, the Qualifying Capacity of the

Resource Adequacy Resource will be reduced on a MW basis for the capacity that is undeliverable.

Resources will be electrically grouped in a manner consistent with the CAISO Deliverability Assessment methodology posted on the CAISO Website. For Resource Adequacy Resources in the same electrical group which have identified deliverability constraints, the Qualifying Capacity of the Resource Adequacy Resources that obtained Full Capacity Deliverability Status or partial deliverability through Section 8.2 of Appendix Y to this CAISO Tariff will be reduced prior to reducing the Qualifying Capacity of those resources which were originally provided Full Capacity Deliverability Status pursuant to inclusion in an Interconnection Study Cycle under Appendix Y to this CAISO Tariff.

* * *

Appendix A Master Definition Supplement

* * *

Cluster Application Window

The time period for submitting Interconnection Requests as set forth in Section 3.3 of Appendix Y.

* * *

Generator Interconnection Agreement (GIA)

The form of Interconnection Agreement applicable to an Interconnection Request pertaining to a Generating Facility processed under the interconnection procedures set forth in Appendix Y. For a Large Generating Facility, a pro forma version of the Interconnection Agreement is set forth in Appendix Z. For a Small Generating Facility, a pro forma version of the Interconnection Agreement is set forth in Appendix T.

Generator Interconnection Procedures (GIP)

The interconnection procedures applicable to an Interconnection Request pertaining to a Generating Facility processed under Appendix Y.

<u>GIA</u>

Generator Interconnection Agreement

GIP

Generator Interconnection Procedures

* * *

Interconnection Financial Security

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

* * *

Interconnection Study

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

Interconnection Study Cycle

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

Interconnection Study Deposit

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

* * *

Large Generator Interconnection Agreement (LGIA)

-The form of interconnection agreement applicable to an Interconnection Request pertaining to a Large Generating Facility <u>processed under the interconnection procedures set forth in Appendix U</u>, a pro forma version of which is set forth in Appendix V-or Appendix Z, as applicable.

Large Generator Interconnection Procedures (LGIP)

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

Large Generator Interconnection Study Process Agreement

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

* * *

Off-Peak Deliverability Assessment

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

* * *

On-Peak Deliverability Assessment

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

* * *

Phase I Interconnection Study

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

* * *

Pre-Construction Activities

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

* * *

Queue Cluster

A set of Interconnection Requests processed pursuant to Appendix Y other than pursuant to the Fast Track Process or the Independent Study Process set forth in Appendix Y.

* * *

Results Meeting

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

Site Exclusivity Deposit

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

* * *

Appendix T

Small Generator Interconnection Agreement

This Small Generator Interconnection day of, 20, by _				this
("Participating TO"), the California Indepublic benefit corporation organized ar	ependent Sy: nd existing u	stem Operator (nder the laws of	Corporation, a California	("CAISO") and
hereinafter sometimes referred to indiv	vidually as "F	arty" or referred	d to collectively as the "	Parties."
Participating TO Information				
Participating TO:				
Attention:				_
Address:				_
City: Phone:		_ State:	Zip:	=
Priorie.	гах		_	
CAISO Information				
Attention: Keith Johnson, Manager, In	nfrastructure	Policy & Contra	acts Department Phil Pe	ttingill
151 Blue Ravine Road	- maon aotaro	1 oney a corner	acto Boparamona	atti igiii
Folsom, CA 95630				
Phone: 916-351-4400 Fax:				
E-mail: kjohnson@caiso.com				
Interconnection Customer Informati	ion			
Interconnection Customer:				
Attention:				
Address:				_
City:		_ State:	Zip:	_
Phone:	Fax:		_	
E-mail Address:			_	
Interconnection Customer Application	No:			
In consideration of the mutual covenar	nts set forth h	nerein, the Parti	es agree as follows:	

Article 1. Scope And Limitations Of Agreement

1.1 This Agreement shall be used for all <u>Small Generating Facility</u> Interconnection Requests submitted under the <u>applicable generator procedure (either the Small Generator Interconnection Procedures (SGIP) set forth in Appendix Y or the Small Generator Interconnection Procedures (SGIP) set forth in Appendix S) except for those submitted under the 10 kW Inverter Process contained in <u>GIP Attachment 5 or SGIP Attachment 5. For those Interconnection Requests</u>, Attachment 5 contains the terms and conditions which serve as the Interconnection Agreement.</u>

- 1.2 This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Participating TO's Transmission System.
- 1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary arrangements (including scheduling) for delivery of electricity in accordance with the CAISO Tariff.
- 1.4 Nothing in this Agreement is intended to affect any other agreement between or among the Parties.

1.5 Responsibilities of the Parties

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

Participating TO's personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

1.5.6 The Participating TO and the CAISO shall coordinate with Affected Systems to support the interconnection.

1.5.7 [This provision is intentionally omitted.]

The Interconnection Customer shall execute the Reliability Management System Agreement of the Western Electricity Coordinating Council prior to parallel operation of the Small Generating Facility. The Reliability Management System Agreement is provided as Attachment 8 to this Agreement.

1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the CAISO Balancing Authority Area, including, but not limited to; 1) the rules and procedures concerning the operation of generation set forth in the CAISO Tariff for the CAISO Controlled Grid and; 2) the Operating Requirements set forth in Attachment 5 of this Agreement.

1.7 Metering

The Interconnection Customer shall be responsible for the reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment specified in Attachments 2 and 3 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

1.8 Reactive Power

- 1.8.1 The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the terminals of each generating unit at a power factor within the range of 0.95 leading to 0.90 lagging, unless the CAISO has established different requirements that apply to all similarly situated generators in the CAISO Balancing Authority Area on a comparable basis. The requirements of this paragraph shall not apply to wind generators and the requirements of Attachment 7 shall apply instead.
- 1.8.2 Payment to the Interconnection Customer for reactive power that the Small Generating Facility provides or absorbs when the CAISO requests the Interconnection Customer to operate its Small Generating Facility outside the range specified in article 1.8.1 will be made by the CAISO in accordance with the applicable provisions of the CAISO Tariff.
- 1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement.

Article 2. Inspection, Testing, Authorization, and Right of Access

2.1 Equipment Testing and Inspection

2.1.1 The Interconnection Customer shall test and inspect its Small Generating Facility and Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the Participating TO and the CAISO of such activities no fewer than five

- (5)Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Participating TO and the CAISO may, at their own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Participating TO and the CAISO a written test report when such testing and inspection is completed.
- 2.1.2 The Participating TO and the CAISO shall provide the Interconnection Customer written acknowledgment that they have received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Participating TO or the CAISO of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

2.2 <u>Authorization Required Prior to Parallel Operation</u>

- 2.2.1 The Participating TO and the CAISO shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Participating TO and the CAISO shall notify the Interconnection Customer of any changes to these requirements as soon as they are known. The Participating TO and the CAISO shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.
- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the Participating TO's Transmission System without prior written authorization of the Participating TO. The Participating TO will provide such authorization to the Interconnection Customer and the CAISO once the Participating TO receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

2.3 Right of Access to Premises

- 2.3.1 Upon reasonable notice, the Participating TO and the CAISO may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three (3) Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Participating TO and the CAISO at least five (5) Business Days prior to conducting any on-site verification testing of the Small Generating Facility.
- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Participating TO and the CAISO shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.
- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

3.1 Effective Date

This Agreement shall become effective upon execution by the Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by the FERC. The Participating TO and the CAISO shall promptly file this Agreement with the FERC upon execution, if required.

3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and shall remain in effect for a period of _____ years from the Effective Date (term specified in individual agreements to be ten (10) years or such other longer period as the Interconnection Customer may request) and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this Agreement (if required), which notice has been accepted for filing by FERC.

- 3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the Participating TO and the CAISO twenty (20) Business Days written notice.
- 3.3.2 Any Party may terminate this Agreement after Default pursuant to article 7.6.
- 3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the CAISO Controlled Grid. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this Agreement or such non-terminating Party otherwise is responsible for these costs under this Agreement.
- 3.3.4 The termination of this Agreement shall not relieve any Party of its liabilities and obligations, owed or continuing at the time of termination.
- 3.3.5 The provisions of this article shall survive termination or expiration of this Agreement.

3.4 Temporary Disconnection

Temporary disconnection of the Small Generating Facility or associated Interconnection Facilities shall continue only for so long as reasonably necessary under Good Utility Practice.

3.4.1 <u>Emergency Conditions</u>

"Emergency Condition" shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; (2) that, in the case of the CAISO, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the CAISO Controlled Grid or the electric systems of others to which the CAISO Controlled Grid is directly connected; (3) that, in the case of the Participating TO, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Participating TO's Transmission System, the Participating TO's Interconnection Facilities, Distribution System, or the electric systems of others to which the Participating TO's electric system is directly connected; or (4) that, in the case of the Interconnection Customer, is imminently likely (as determined in a nondiscriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. Under Emergency Conditions, the CAISO or the Participating TO may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility. The Participating TO or the CAISO shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may

reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. The Interconnection Customer shall notify the Participating TO and the CAISO promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the CAISO Controlled Grid, the Participating TO's Interconnection Facilities, or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of the Interconnection Customer's or Participating TO's facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Routine Maintenance, Construction, and Repair

The Participating TO or the CAISO may interrupt interconnection service or curtail the output of the Small Generating Facility and temporarily disconnect the Small Generating Facility from the CAISO Controlled Grid when necessary for routine maintenance, construction, and repairs on the CAISO Controlled Grid or the Participating TO's electric system. The Party scheduling the interruption shall provide the Interconnection Customer with (5) five Business Days notice prior to such interruption. The Party scheduling the interruption shall use Reasonable Efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

The Interconnection Customer shall update its planned maintenance schedules in accordance with the CAISO Tariff. The CAISO may request the Interconnection Customer to reschedule its maintenance as necessary to maintain the reliability of the CAISO Controlled Grid in accordance with the CAISO Tariff. Such planned maintenance schedules and updates and changes to such schedules shall be provided by the Interconnection Customer to the Participating TO concurrently with their submittal to the CAISO.

3.4.3 Forced Outages

During any forced outage, the Participating TO or the CAISO may suspend interconnection service to effect immediate repairs on the CAISO Controlled Grid or the Participating TO's electric system. The Participating TO or the CAISO shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Participating TO or the CAISO shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection. The Interconnection Customer shall notify CAISO, as soon as practicable, of all forced outages or reductions of the Small Generating Facility in accordance with the CAISO Tariff.

3.4.4 Adverse Operating Effects

The Participating TO or the CAISO shall notify the Interconnection Customer as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the CAISO Controlled Grid, the Participating TO's Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Participating TO or the CAISO may disconnect the Small Generating Facility. The Participating TO or the CAISO shall provide the Interconnection Customer with (5) five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 <u>Modification of the Small Generating Facility</u>

The Interconnection Customer must receive written authorization from the Participating TO and the CAISO before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the CAISO Controlled Grid or the

Participating TO's electric system. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the Participating TO's and the CAISO's prior written authorization, the Participating TO or the CAISO shall have the right to temporarily disconnect the Small Generating Facility.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, the Participating TO's electric system, and the CAISO Controlled Grid to their normal operating state as soon as reasonably practicable following a temporary disconnection.

Article 4. Costs for Interconnection Facilities & Distribution Upgrades

4.1 Interconnection Facilities

- 4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Participating TO shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, the CAISO, and the Participating TO.
- 4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Participating TO's Interconnection Facilities.

4.2 Distribution Upgrades

The Participating TO shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Participating TO and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer.

Article 5. Cost Responsibility For Network Upgrades

5.1 Applicability

No portion of this <u>Articlearticle</u> 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades.

5.2 <u>Network Upgrades</u>

The Participating TO shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Participating TO and the Interconnection Customer agree, the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Participating TO elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne initially by the Interconnection Customer.

5.3 Transmission Credits

No later than thirty (30) days prior to the Commercial Operation Date, the Interconnection Customer may make a one-time election by written notice to the CAISO and the Participating TO to receive Congestion RevenueFirm Transmission Rights as defined in and as available under the CAISO Tariff at the time of the election in accordance with the CAISO Tariff, in lieu of a refund of the cost of Network Upgrades in accordance with Article 5.3.1.

5.3.1 Repayment of Amounts Advanced for Network Upgrades

Upon the Commercial Operation Date, the Interconnection Customer shall be entitled to a repayment, equal to the total amount paid to the Participating TO for the cost of Network Upgrades. Such amount shall include any tax gross-up or other tax-related payments associated with Network Upgrades not refunded to the Interconnection Customer, and shall be paid to the Interconnection Customer by the Participating TO on a dollar-fordollar basis either through (1) direct payments made on a levelized basis over the fiveyear period commencing on the Commercial Operation Date; or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years from the Commercial Operation Date. Notwithstanding the foregoing, if this Agreement terminates within five (5) years from the Commercial Operation Date, the Participating TO's obligation to pay refunds to the Interconnection Customer shall cease as of the date of termination. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment. Interest shall continue to accrue on the repayment obligation so long as this Agreement is in effect. The Interconnection Customer may assign such repayment rights to any person.

If the Small Generating Facility fails to achieve commercial operation, but it or another Generating Facility is later constructed and makes use of the Network Upgrades, the Participating TO shall at that time reimburse Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the Generating Facility, if different, is responsible for identifying the entity to which reimbursement must be made.

5.3.2 Special Provisions for Affected Systems

The Interconnection Customer shall enter into an agreement with the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid, as applicable, in accordance with the applicable generation interconnection procedure under which the Small Generating Facility was processed (SGIP or GIP).SGIP. Such agreement shall specify the terms governing payments to be made by the Interconnection Customer to the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid. In no event shall the Participating TO be responsible for the repayment for any facilities that are not part of the Participating TO's Transmission System.

5.3.3 Rights Under Other Agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the Small Generating Facility.

Article 6. Billing, Payment, Milestones, And Financial Security

- 6.1 Billing and Payment Procedures and Final Accounting
 - 6.1.1 The Participating TO shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within thirty (30) calendar days of receipt, or as otherwise agreed to by the Parties. Notwithstanding the foregoing, any invoices between the CAISO and another Party shall be submitted and paid in accordance with the CAISO Tariff.
 - 6.1.2 Within six_(6) months of completing the construction and installation of the Participating TO's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Participating TO shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Participating TO for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Participating TO shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Participating TO within thirty (30) calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility under this Agreement, the Participating TO shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, as defined in article 7.5.1, it shall immediately notify the other Parties of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) request appropriate amendments to Attachment 4. The Parties affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless (1) they will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) they have reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

6.3 <u>Financial Security Arrangements for Small Generating Facilities Processed Under the Fast Track Process or Small Generating Facilities Processed under SGIP</u>

The terms and conditions of this Article 6.3 shall apply only to:

- Small Generating Facilities that are no larger than 5 MW that are processed under the Fast Track Process under the Generation Interconnection Procedures, CAISO Tariff Appendix Y; and
- Small Generating Facilities processed under the Small Generation Interconnection
 Procedures set forth in CAISO Tariff Appendix S.
 In such case, the terms of Article 6.4 below do not apply to this Agreement.

For easy reference, the Parties shall check the Box below when this Article 6.3 applies:

[] THIS ARTICLE 6.3 APPLIES

- At least twenty (20) Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Participating TO's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Participating TO, at the Interconnection Customer's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Participating TO and is consistent with the Uniform Commercial Code of the jurisdiction where the Point of Interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Participating TO's Interconnection Facilities and Upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the Participating TO under this Agreement during its term. In addition:
- 6.3.2 If a guarantee is provided, the 1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Participating TO, and contain terms and conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.

6.3.3 If a letter of credit or surety bond is provided, the

- 6.3.2 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Participating TO and must specify a reasonable expiration date.
- 6.4 Financial Security Arrangements for All Other Small Generating Facilities

The terms of this Article 6.4 apply to Small Generating Facilities that have been processed under either

- 1. the Cluster Study Process or
- 2. the Independent Study Track Process

of the Generation Interconnection Procedures set forth in CAISO Tariff Appendix Y. In such case, the provisions of Article 6.3 do not apply to this Agreement.

In such case, the terms of Article 6.3 above do not apply to this Agreement.

For easy reference, the Parties shall check the Box below when this Article 6.4 applies:

[] THIS ARTICLE 6.4 APPLIES

- 6.4.1 The Interconnection Customer is obligated to provide all necessary Interconnection

 Financial Security required under Section 9 of the GIP in a manner acceptable under

 Section 9 of the GIP. Failure by the Interconnection Customer to timely satisfy the GIP's requirements for the provision of Interconnection Financial Security shall be deemed a breach of this Agreement and a condition of Default of this Agreement.
- 6.4.2 Notwithstanding any other provision in this Agreement for notice of Default and opportunity to cure such Default, the CAISO or the Participating TO shall provide Interconnection Customer with written notice of any Default due to timely failure to post Financial Security, and the Interconnection Customer shall have five (5) Business Days from the date of such notice to cure such Default by posting the required Financial Security. If the Interconnection Customer fails to cure the Default, then this Agreement shall be deemed terminated.

Article 7. Assignment, Liability, Indemnity, Force Majeure, And Default

7.1 Assignment

This Agreement may be assigned by any Party upon <u>fifteen (15)</u> Business Days prior written notice and opportunity to object by the other Parties; provided that:

- 7.1.1 Any 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, provided that the Interconnection Customer promptly notifies the Participating TO and the CAISO of any such assignment;
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Participating TO or the CAISO, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Participating TO and the CAISO of any such assignment.
- 7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

7.2 Limitation of Liability

Each Party's liability to the other Parties for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall any Party be liable to the other Parties for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

7.3 <u>Indemnity</u>

- 7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in Articlearticle 7.2.
- 7.3.2 The Parties shall at all times indemnify, defend, and hold the other Parties harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from another Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.
- 7.3.3 If an indemnified Party is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified Party may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.
- 7.3.4 If an indemnifying Party is obligated to indemnify and hold any indemnified Party harmless under this article, the amount owing to the indemnified Party shall be the amount of such indemnified Party's actual loss, net of any insurance or other recovery.
- 7.3.5 Promptly after receipt by an indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified Party shall notify the indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party.

7.4 Consequential Damages

Other than as expressly provided for in this Agreement, no Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to another Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

7.5 Force Majeure

- 7.5.1 As used in this article, a Force Majeure Event 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 an act of negligence or intentional wrongdoing by the Party claiming Force Majeure."
- 7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Parties, either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Parties informed on a continuing basis of developments relating to the Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

7.6 Default

- 7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of another Party. Upon a Default, the affected non-defaulting Party(ies) shall give written notice of such Default to the defaulting Party. Except as provided in Articlearticle 7.6.2 and in Article 6.4.2, the defaulting Party shall have sixty (60) calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.
- 7.6.2 If a Default is not cured as provided in this article, or if a Default is not capable of being cured within the period provided for herein, the affected non-defaulting Party(ies) shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not such Party(ies) terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

Article 8. Insurance

- 8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Participating TO or CAISO, except that the Interconnection Customer shall show proof of insurance to the Participating TO and CAISO no later than ten Business Days prior to the anticipated Commercial Operation Date. If the Interconnection Customer is of sufficient credit-worthiness, it may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.
- The Participating TO agrees to maintain general liability insurance or self-insurance consistent with the Participating TO's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Participating TO's liabilities undertaken pursuant to this Agreement.
- 8.3 The CAISO agrees to maintain general liability insurance or self-insurance consistent with the CAISO's commercial practice. Such insurance shall not exclude coverage for the CAISO's liabilities undertaken pursuant to this Agreement.
- The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

Article 9. Confidentiality

- 9.1 Confidential Information shall mean any confidential and/or proprietary information provided by one Party to another Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.
- 9.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Parties and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.
 - 9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Parties as it employs to protect its own Confidential Information.
 - 9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if FERC, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to FERC, within the time provided for in the request for information. In providing the information to FERC, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by FERC and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this Agreement prior to the release of the Confidential Information to FERC. The Party shall notify the other Parties to this Agreement when it is notified by FERC 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 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

Article 10. Disputes

All disputes arising out of or in connection with this Agreement whereby relief is sought by or from CAISO shall be settled in accordance with the provisions of Article 13 of the CAISO Tariff, except that references to the CAISO Tariff in such Article 13 of the CAISO Tariff shall be read as reference to this Agreement. Disputes arising out of or in connection with this Agreement not subject to provisions of Article 13 of the CAISO Tariff shall be resolved as follows:

- 10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.
- 10.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.
- 10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, either Party may contact FERC's Dispute Resolution Service (DRS) for assistance in resolving the dispute.
- The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at http://www.ferc.gov/legal/adr.asp.
- 10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible <u>for one-forone-half</u> of any costs paid to neutral third-parties.
- 10.6 If neither Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then either Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

Article 11. Taxes

11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with FERC policy and Internal Revenue Service requirements.

11.2 Each Party shall cooperate with the other Parties to maintain the other Parties' tax status.

Nothing in this Agreement is intended to adversely affect the Participating TO's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

Article 12. Miscellaneous

12.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of ______ (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

12.2 <u>Amendment</u>

The Parties may amend this Agreement by a written instrument duly executed by all of the Parties, or under article 12.12 of this Agreement.

12.3 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.

12.4 Waiver

- 12.4.1 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.
- 12.4.2 Any waiver at any time by any 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 Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO. Any waiver of this Agreement shall, if requested, be provided in writing.

12.5 Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between or among the Parties with respect to the subject matter of this 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.

12.6 <u>Multiple Counterparts</u>

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.

12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership among the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.

12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

12.9 <u>Security Arrangements</u>

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all transmission providers, market participants, and interconnection customers interconnected to electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

12.10 Environmental Releases

Each Party shall notify the other Parties, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Parties. The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Parties copies of any publicly available reports filed with any governmental authorities addressing such events.

12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Parties for the performance of such subcontractor.

- 12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Participating TO or the CAISO be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.
- 12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

12.12 Reservation of Rights

The CAISO and Participating TO shall each have the right to make a unilateral filing with FERC to modify this Agreement pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following articles of this Agreement and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these articles:

Introductory Paragraph, 1.1, 1.2, 1.3, 1.4, 1.5.1, 1.5.2, 1.5.3, 1.5.4, 1.5.5, 1.5.6, 1.5.7, 1.6, 1.7, 1.8.1, 1.9, 2.1, 2.2.1, 2.3, 3, 4.1.1 (last sentence only), 5.1, 5.3, 6.2, 7, 8, 9, 11, 12, 13, Attachment 1, Attachment 4, Attachment 5, Attachment 7, and Attachment 78.

The Participating TO shall have the exclusive right to make a unilateral filing with FERC to modify this Agreement pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following articles of this Agreement and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these articles:

2.2.2, 4.1.1 (all but the last sentence), 4.1.2, 4.2, 5.2, 6.1.1 (all but the last sentence), 6.1.2, 6.3, 10 (all but preamble), Attachment 2, Attachment 3 and Attachment 6.

The CAISO shall have the exclusive right to make a unilateral filing with FERC to modify this Agreement pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following articles of this Agreement and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these articles:

1.8.2, 6.1.1 (last sentence only) and 10 (preamble only).

The Interconnection Customer, the CAISO, and the Participating TO shall have the right to make a unilateral filing with FERC to modify this Agreement under any applicable provision of the Federal Power Act and FERC's rules and regulations; 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, except to the extent that the Parties otherwise mutually agree as provided herein.

Article 13. Notices

13.1 General

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national courier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Interconnection Custom	ier:		
Interconnection Custom	er:		
Address:			
City:	State	:e: Zip:	
Phone:		<u> </u>	
If to the Participating TO:			
Participating TO:			
Address:			
		e:Zip:	
	Fax:		
If to the CAISO:			
California Independent	System Operator		
Attention:			

Folsom, CA 95630 Phone: 916-351-4400 Fax: 13.2 Billing and Payment Billings and payments shall be sent to the addresses set out below: Interconnection Customer: Attention: Address: City: _____ State: ____ Zip: ____ Participating TO: Attention: Address: State: Zip: 13.3 Alternative Forms of Notice Any notice or request required or permitted to be given by any Party to the other Parties and not required by this Agreement to be given in writing may be so given by telephone, facsimile or email to the telephone numbers and e-mail addresses set out below: If to the Interconnection Customer: Interconnection Customer: Attention: Address: _____ City: _____ State: ____ Zip:____ Phone: _____ Fax: ____ E-mail address: If to the Participating TO: Participating TO: Attention: Address: State: Zip: City: _____ Fax: _____ Phone: _____ E-mail address: If to the CAISO: California Independent System Operator Attention: 151 Blue Ravine Road Folsom, CA 95630 Phone: 916-351-4400 E-mail address: Fax: _____

13.4 <u>Designated Operating Representative</u>

151 Blue Ravine Road

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

Interconnection Custome	r:	
Address:		
City:	State:	Zip:
Phone:		·
Participating TO's Operating Rep	resentative:	
Participating TO:		
Attention:		
Address:		
City:	State:	Zip:
Phone:	Fax:	
CAISO's Operating Representative	ve ·	
California Independent S		
Attention: 151 Blue Ravine Road		
Folsom, CA 95630		
Phone: 916-351-4400	Fax:	
1 110110. 5 10 55 1 4400	i un	_

13.5

<u>Changes to the Notice Information</u>
Any Party may change this information by giving five Business Days written notice to the other Parties prior to the effective date of the change.

Article 14. Signatures

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

For the California Independent System Operator

Name:
Title:
Date:
For the Participating TO
Name:
Title:
Date:
For the Interconnection Customer
Name:
Title:
Date:

Attachment 1

Glossary of Terms

Affected System – An electric system other than the CAISO Controlled Grid that may be affected by the proposed interconnection, including the Participating TO's electric system that is not part of the CAISO Controlled Grid.

Applicable Laws and Regulations – All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

Balancing Authority Area - The collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.

Business Day – Monday through Friday, excluding federal holidays and the day after Thanksgiving Day.

Commercial Operation Date – The date on which a Small Generating Facility commenced generating electricity for sale as agreed upon by the Participating TO and the Interconnection Customer and in accordance with any implementation plan agreed to by the Participating TO and the CAISO for multiple individual generating units or project phases at a Small Generating Facility where an Interconnection Customer intends to establish separate Commercial Operation Dates for those generating units or project phases.

Default – The failure of a breaching Party to cure its breach under this Agreement.

Distribution System – Those non-CAISO-controlled transmission and distribution facilities owned by the Participating TO.

Distribution Upgrades – The additions, modifications, and upgrades to the Participating TO's Distribution System. Distribution Upgrades do not include Interconnection Facilities.

Good Utility Practice – Any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be any one of a number of the optimum practices, methods, or acts to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

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

Interconnection Facilities – The Participating TO's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Participating TO's Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades or Network Upgrades.

Interconnection Handbook – A handbook, developed by the Participating TO and posted on the Participating TO's website or otherwise made available by the Participating TO, describing technical and operational requirements for wholesale generators and loads connected to the Participating TO's Transmission System, as such handbook may be modified or superseded from time to time. The Participating TO's standards contained in the Interconnection Handbook shall be deemed consistent with Good Utility Practice and applicable reliability standards.

Interconnection Request – A request, in accordance with the CAISO Tariff, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the CAISO Controlled Grid.

CAISO Controlled Grid – The system of transmission lines and associated facilities of the parties to <u>athe</u> Transmission Control Agreement that have been placed under the CAISO's Operational Control.

CAISO Tariff – The CAISO's tariff, as filed with FERC, and as amended or supplemented from time to time, or any successor tariff.

Material Modification – A modification that has a material impact on the cost or timing of any Interconnection Request or any other valid interconnection request with a later queue priority date.

Network Upgrades – Additions, modifications, and upgrades to the Participating TO's Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the CAISO Controlled Grid to accommodate the interconnection of the Small Generating Facility with the CAISO Controlled Grid. Network Upgrades do not include Distribution Upgrades.

Operational Control – The rights of the CAISO under <u>athe</u> Transmission Control Agreement and the CAISO Tariff to direct the parties to the Transmission Control Agreement how to operate their transmission lines and facilities and other electric plant affecting the reliability of those lines and facilities for the purpose of affording comparable non-discriminatory transmission access and meeting applicable reliability criteria.

Operating Requirements – Any operating and technical requirements that may be applicable due to the CAISO, Western Electricity Coordinating Council, Balancing Authority Area, or the Participating TO's requirements, including those set forth in this Agreement.

Party or Parties – The Participating TO, CAISO, Interconnection Customer or the applicable combination of the above.

Point of Interconnection – The point where the Interconnection Facilities connect with the Participating TO's Transmission System.

Reasonable Efforts – With respect to an action required to be attempted or taken by a Party under this Agreement, 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.

Small Generating Facility – The Interconnection Customer's device for the production of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

Transmission Control Agreement – CAISO FERC Electric Tariff No. 7.

Transmission System – The facilities owned and operated by the Participating TO and that have been placed under the CAISO's Operational Control, which facilities form part of the CAISO Controlled Grid.

Upgrades – The required additions and modifications to the Participating TO's Transmission System and Distribution System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

Attachment 2

Description and Costs of the Small Generating Facility, Interconnection Facilities, and Metering Equipment

Equipment, including the Small Generating Facility, Interconnection Facilities, and metering equipment shall be itemized and identified as being owned by the Interconnection Customer or the Participating TO. The Participating TO will provide a best estimate itemized cost, including overheads, of its Interconnection Facilities and metering equipment, and a best estimate itemized cost of the annual operation and maintenance expenses associated with its Interconnection Facilities and metering equipment.

Attachment 3

One-line Diagram Depicting the Small Generating Facility, Interconnection Facilities, Metering Equipment, and Upgrades

Attachment 4 Milestones In-Service Date: ______ Critical milestones and responsibility as agreed to by the Parties: Milestone/Date Responsible Party (1) ______ (2) ______ (3) ______ (4) ______ (5) ______ (5) ______

(0)		
(9)		
(10)		
Agreed to by:		
For the CAISO	Date	
For the Participating TO	Date	
For the Interconnection Customer	Date	

(0)

Attachment 5

Additional Operating Requirements for the CAISO Controlled Grid and Affected Systems Needed to Support the Interconnection Customer's Needs

The Participating TO and the CAISO shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the CAISO Controlled Grid.

Attachment 6

Participating TO's Description of its Upgrades and Best Estimate of Upgrade Costs

The Participating TO shall describe Upgrades and provide an itemized best estimate of the cost, including overheads, of the Upgrades and annual operation and maintenance expenses associated with such Upgrades. The Participating TO shall functionalize Upgrade costs and annual expenses as either transmission or distribution related.

Attachment 7

INTERCONNECTION REQUIREMENTS FOR A WIND GENERATING PLANT

Attachment 7 sets forth requirements and provisions specific to a wind generating plant. All other requirements of this Agreement continue to apply to wind generating plant interconnections.

A. Technical Standards Applicable to a Wind Generating Plant

i. Low Voltage Ride-Through (LVRT) Capability

A wind generating plant shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below. The LVRT standard provides for a transition period standard and a post-transition period standard.

Transition Period LVRT Standard

The transition period standard applies to wind generating plants that have either: (i) interconnection agreements signed and filed with FERC, filed with FERC in unexecuted form, or filed with FERC as non-conforming agreements between January 1, 2006 and December 31, 2006, with a scheduled in-service date no later than December 31, 2007, or (ii) wind generating turbines subject to a wind turbine procurement contract executed prior to December 31, 2005, for delivery through 2007.

- 1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the Participating TO. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles at a voltage as low as 0.15 p.u., as measured at the high side of the wind generating plant step-up transformer (i.e. the transformer that steps the voltage up to the transmission interconnection voltage or "GSU"), after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the transmission system.
- 2.1. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU or to faults that would result in a voltage lower than 0.15 per unit on the high side of the GSU serving the facility.
- 3.1. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
- 4.1. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAr Compensator, etc.) within the wind generating plant or by a combination of generator performance and additional equipment.
- 5.1. Existing individual generator units that are, or have been, interconnected to the network at the same location at the effective date of the Attachment 7 LVRT Standard are exempt from meeting the Attachment 7 LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Attachment 7 LVRT Standard.

Post-transition Period LVRT Standard

All wind generating plants not covered by the transition period described above must meet the following requirements:

•1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 – 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the Participating TO. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the CAISO Controlled Grid. A wind generating plant shall remain interconnected during such a fault on the CAISO Controlled Grid for a voltage level as low as zero volts, as measured at the high voltage side of the wind GSU.

- •2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.
- •3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
- •4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAr Compensator) within the wind generating plant or by a combination of generator performance and additional equipment.
- •5. Existing individual generator units that are, or have been, interconnected to the CAISO Controlled Grid at the same location at the effective date of the Attachment 7 LVRT Standard are exempt from meeting the Attachment 7 LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Attachment 7 LVRT Standard.

ii. Power Factor Design Criteria (Reactive Power)

A wind generating plant shall operate within a power factor within the range of 0.95 leading to 0.95 lagging, measured at the Point of Interconnection as defined in this Agreement in order to maintain a specified voltage schedule, if the system impact study shows that such a requirement is necessary to ensure safety or reliability. The power factor range standard can be met by using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two, if agreed to by the Participating TO and CAISO. The Interconnection Customer shall not disable power factor equipment while the wind plant is in operation. Wind plants shall also be able to provide sufficient dynamic voltage support in lieu of the power system stabilizer and automatic voltage regulation at the generator excitation system if the system impact study shows this to be required for system safety or reliability.

iii. Supervisory Control and Data Acquisition (SCADA) Capability

The wind plant shall provide SCADA capability to transmit data and receive instructions from the Participating TO and CAISO to protect system reliability. The Participating TO and CAISO and the wind plant Interconnection Customer shall determine what SCADA information is essential for the proposed wind plant, taking into account the size of the plant and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

Attachment 8

[This Attachment is Intentionally Omitted]

Reliability Management System Agreement

RELIABILITY MANAGEMENT SYSTEM AGREEMENT
by and between
[TRANSMISSION OPERATOR]
and
[GENERATOR]

THIS RELIABILITY M	ANAGEMENT SYSTEM	ACREMENT (the "Agr	eament") is entered into	thic
TITIO INCLINABILITY IN	ANAGEMENT OFFEM !	MOREEMENT (the Agr	comont j, is cintored into	ti 110
day of	2002 by and between	·	(the "Transmissio	n
day or	_, 2002, by and between		(tric francinicolo	-
Operator") and		the "Congrator")		
ODCIALUI / AIIU		HC OCHCIAIOI I.		

WHEREAS, there is a need to maintain the reliability of the interconnected electric systems encompassed by the WSCC in a restructured and competitive electric utility industry;

WHEREAS, with the transition of the electric industry to a more competitive structure, it is desirable to have a uniform set of electric system operating rules within the Western Interconnection, applicable in a fair, comparable and non-discriminatory manner, with which all market participants comply; and

WHEREAS, the members of the WSCC, including the Transmission Operator, have determined that a contractual Reliability Management System provides a reasonable, currently available means of maintaining such reliability.

NOW, THEREFORE, in consideration of the mutual agreements contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Transmission Operator and the Generator agree as follows:

1. PURPOSE OF AGREEMENT

The purpose of this Agreement is to maintain the reliable operation of the Western Interconnection through the Generator's commitment to comply with certain reliability standards.

2. DEFINITIONS

In addition to terms defined in the beginning of this Agreement and in the Recitals hereto, for purposes of this Agreement the following terms shall have the meanings set forth beside them below.

Control Area means an electric system or systems, bounded by interconnection metering and telemetry, capable of controlling generation to maintain its interchange schedule with other Control Areas and contributing to frequency regulation of the Western Interconnection.

FERC means the Federal Energy Regulatory Commission or a successor agency.

Member means any party to the WSCC Agreement.

Party means either the Generator or the Transmission Operator and

Parties means both of the Generator and the Transmission Operator.

Reliability Management System or RMS means the contractual reliability management program implemented through the WSCC Reliability Criteria Agreement, the WSCC RMS Agreement, this Agreement, and any similar contractual arrangement.

Western Interconnection means the area comprising those states and provinces, or portions thereof, in Western Canada, Northern Mexico and the Western United States in which Members of the WSCC operate synchronously connected transmission systems.

Working Day means Monday through Friday except for recognized legal holidays in the state in which any notice is received pursuant to Section 8.

WSCC means the Western Systems Coordinating Council or a successor entity.

WSCC Agreement means the Western Systems Coordinating Council Agreement dated March 20, 1967, as such may be amended from time to time.

WSCC Reliability Criteria Agreement means the Western Systems Coordinating Council Reliability Criteria Agreement dated June 18, 1999 among the WSCC and certain of its member transmission operators, as such may be amended from time to time.

WSCC RMS Agreement means an agreement between the WSCC and the Transmission Operator requiring the Transmission Operator to comply with the reliability criteria contained in the WSCC Reliability Criteria Agreement.

WSCC Staff means those employees of the WSCC, including personnel hired by the WSCC on a contract basis, designated as responsible for the administration of the RMS.

3. TERM AND TERMINATION

- **3.1 Term.** This Agreement shall become effective thirty (30) days after the date of issuance of a final FERC order accepting this Agreement for filing without requiring any changes to this Agreement unacceptable to either Party. Required changes to this Agreement shall be deemed unacceptable to a Party only if that Party provides notice to the other Party within fifteen (15) days of issuance of the applicable FERC order that such order is unacceptable].
- [Note: if the interconnection agreement is not FERC jurisdictional, replace bracketed language with: [on the later of: (a) the date of execution; or (b) the effective date of the WSCC RMS Agreement.]]
- 3.2 Notice of Termination of WSCC RMS Agreement. The Transmission Operator shall give the Generator notice of any notice of termination of the WSCC RMS Agreement by the WSCC or by the Transmission Operator within fifteen (15) days of receipt by the WSCC or the Transmission Operator of such notice of termination.
- 3.3 Termination by the Generator. The Generator may terminate this Agreement as follows:
 (a) following the termination of the WSCC RMS Agreement for any reason by the WSCC or by the Transmission Operator, provided such notice is provided within forty-five (45) days of the termination of the WSCC RMS Agreement;
- (b) following the effective date of an amendment to the requirements of the WSCC Reliability Criteria Agreement that adversely affects the Generator, provided notice of such termination is given within forty-five (45) days of the date of issuance of a FERC order accepting such amendment for filing, provided further that the forty-five (45) day period within which notice of termination is required may be extended by the Generator for an additional forty-five (45) days if the Generator gives written notice to the Transmission Operator of such requested extension within the initial forty-five (45) day period; or (c) for any reason on one year's written notice to the Transmission Operator and the WSCC.
- **3.4 Termination by the Transmission Operator.** The Transmission Operator may terminate this Agreement on thirty (30) days' written notice following the termination of the WSCC RMS Agreement for any reason by the WSCC or by the Transmission Operator, provided such notice is provided within thirty (30) days of the termination of the WSCC RMS Agreement.
- **3.5 Mutual Agreement.** This Agreement may be terminated at any time by the mutual agreement of the Transmission Operator and the Generator.

4. COMPLIANCE WITH AND AMENDMENT OF WSCC RELIABILITY CRITERIA

4.1 Compliance with Reliability Criteria. The Generator agrees to comply with the requirements of the WSCC Reliability Criteria Agreement, including the applicable WSCC reliability criteria contained in Section IV of Annex A thereof, and, in the event of failure to comply, agrees to be subject to the sanctions applicable to such failure. Each and all of the provisions of the WSCC Reliability Criteria Agreement are hereby incorporated by reference into this Agreement as though set forth fully herein, and the Generator shall for all purposes be considered a Participant, and shall be entitled to all of the rights and privileges and be subject to all of the obligations of a Participant, under and in connection with the WSCC Reliability

Criteria Agreement, including but not limited to the rights, privileges and obligations set forth in Sections 5, 6 and 10 of the WSCC Reliability Criteria Agreement.

- **4.2 Modifications to WSCC Reliability Criteria Agreement.** The Transmission Operator shall notify the Generator within fifteen (15) days of the receipt of notice from the WSCC of the initiation of any WSCC process to modify the WSCC Reliability Criteria Agreement. The WSCC RMS Agreement specifies that such process shall comply with the procedures, rules, and regulations then applicable to the WSCC for modifications to reliability criteria.
- 4.3 Notice of Modifications to WSCC Reliability Criteria Agreement. If, following the process specified in Section 4.2, any modification to the WSCC Reliability Criteria Agreement is to take effect, the Transmission Operator shall provide notice to the Generator at least forty-five (45) days before such modification is scheduled to take effect.
- **4.4 Effective Date.** Any modification to the WSCC Reliability Criteria Agreement shall take effect on the date specified by FERC in an order accepting such modification for filing.
- 4.5 Transfer of Control or Sale of Generation Facilities. In any sale or transfer of control of any generation facilities subject to this Agreement, the Generator shall as a condition of such sale or transfer require the acquiring party or transferee with respect to the transferred facilities either to assume the obligations of the Generator with respect to this Agreement or to enter into an agreement with the Control Area Operator in substantially the form of this Agreement.

5. SANCTIONS

- **5.1 Payment of Monetary Sanctions.** The Generator shall be responsible for payment directly to the WSCC of any monetary sanction assessed against the Generator pursuant to this Agreement and the WSCC Reliability Criteria Agreement. Any such payment shall be made pursuant to the procedures specified in the WSCC Reliability Criteria Agreement.
- **5.2 Publication.** The Generator consents to the release by the WSCC of information related to the Generator's compliance with this Agreement only in accordance with the WSCC Reliability Criteria Agreement.
- **5.3 Reserved Rights.** Nothing in the RMS or the WSCC Reliability Criteria Agreement shall affect the right of the Transmission Operator, subject to any necessary regulatory approval, to take such other measures to maintain reliability, including disconnection, which the Transmission Operator may otherwise be entitled to take.

6. THIRD PARTIES

Except for the rights and obligations between the WSCC and Generator specified in Sections 4 and 5, this Agreement creates contractual rights and obligations solely between the Parties. Nothing in this Agreement shall create, as between the Parties or with respect to the WSCC: (1) any obligation or liability whatsoever (other than as expressly provided in this Agreement), or (2) any duty or standard of care whatsoever. In addition, nothing in this Agreement shall create any duty, liability, or standard of care whatsoever as to any other party. Except for the rights, as a third-party beneficiary with respect to Sections 4 and 5, of the WSCC against Generator, no third party shall have any rights whatsoever with respect to enforcement of any provision of this Agreement. Transmission Operator and Generator expressly intend that the WSCC is a third-party beneficiary to this Agreement, and the WSCC shall have the right to seek to enforce against Generator any provisions of Sections 4 and 5, provided that specific performance shall be the sole remedy available to the WSCC pursuant to this Agreement, and Generator shall not be liable to the WSCC pursuant to this Agreement for damages of any kind whatsoever (other than the payment of sanctions to the WSCC, if so construed), whether direct, compensatory, special, indirect, consequential, or punitive.

7. REGULATORY APPROVALS

This Agreement shall be filed with FERC by the Transmission Operator under Section 205 of the Federal Power Act. In such filing, the Transmission Operator shall request that FERC accept this Agreement for filing without modification to become effective on the day after the date of a FERC order accepting this Agreement for filing. [This section shall be omitted for agreements not subject to FERC jurisdiction.]

8. NOTICES

	١nv	potice	domo	and or ro	auget ro	auirod a	ar autho	rizad by	thic A	aroomo	at to be	aivon in v	uritina to	a Party
2	led	Lba d	معتمينام	d by band	d courie	r or ove	rnight c	dalivary (Sarvica	mailed	Lby cart	ified mail	(return	receint
f	equ	ested) posta	ige prepa	rid, faxe c	d, or de	livered	by mutu	ally agr	eed ele	ctronic l	means to	such Pa	arty at the
f	ollo	wing a	address	S:										

·		
	Fax:	
	1 ux.	
		
	Fax:	

The designation of such person and/or address may be changed at any time by either Party upon receipt by the other of written notice. Such a notice served by mail shall be effective upon receipt. Notice transmitted by facsimile shall be effective upon receipt if received prior to 5:00 p.m. on a Working Day, and if not received prior to 5:00 p.m. on a Working Day, receipt shall be effective on the next Working Day.

9. APPLICABILITY

This Agreement (including all appendices hereto and, by reference, the WSCC Reliability Criteria Agreement) constitutes the entire understanding between the Parties hereto with respect to the subject matter hereof, supersedes any and all previous understandings between the Parties with respect to the subject matter hereof, and binds and inures to the benefit of the Parties and their successors.

10. AMENDMENT

No amendment of all or any part of this Agreement shall be valid unless it is reduced to writing and signed by both Parties hereto. The terms and conditions herein specified shall remain in effect throughout the term and shall not be subject to change through application to the FERC or other governmental body or authority, absent the agreement of the Parties.

11. INTERPRETATION

Interpretation and performance of this Agreement shall be in accordance with, and shall be controlled by, the laws of the State of ______ but without giving effect to the provisions thereof relating to conflicts of law. Article and section headings are for convenience only and shall not affect the interpretation of this Agreement. References to articles, sections and appendices are, unless the context otherwise requires, references to articles, sections and appendices of this Agreement.

12. PROHIBITION ON ASSIGNMENT

This Agreement may not be assigned by either Party without the consent of the other Party, which consent shall not be unreasonably withheld; provided that the Generator may without the consent of the

WSCC assign the obligations of the Generator pursuant to this Agreement to a transferee with respect to any obligations assumed by the transferee by virtue of Section 4.5 of this Agreement.

13. SEVERABILITY

If one or more provisions herein shall be invalid, illegal or unenforceable in any respect, it shall be given effect to the extent permitted by applicable law, and such invalidity, illegality or unenforceability shall not affect the validity of the other provisions of this Agreement.

14. COUNTERPARTS

This Agreement may be executed in counterparts and each shall have the same force and effect as an original.

IN WITNESS WHEREOF, the Transmission Operator and the Generator have each caused this Reliability Management System Agreement to be executed by their respective duly authorized officers as of the date first above written.

By:		
Name:		
Title:		
By:		
Name:		
Title:		

* * *

Appendix Y LGIP For Interconnection Requests in A Queue Cluster Window

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

Large-Generator Interconnection Procedures (LGIP)

Table of Contents

1 OBJECTIVES AND DEFINITIONS
1.1 Objectives and Applicability
1.2 Definitions
1.2.1 Master Definitions Supplement
1.2.2 Special Definitions for this GIPLGIP
2 SCOPE AND APPLICATION
2.1 Application of Large Generator Interconnection Procedures
2.2 Comparability
2.3 Interconnection Base Case Data
2.4 Interconnection Service and Studies
2.4.1 No Applicability to Transmission Service
2.4.2 The Product
2.4.3 The Interconnection Studies
3 INTERCONNECTION REQUESTS
3.1 General
3.2 Roles and Responsibilities
3.3 <u>Timing for Submitting Interconnection Requests</u>
3.3.1 Timing for Submitting Interconnection Requests in Queue Cluster-Windows
3.3.2 Timing for Submitting Interconnection Requests for Independent Study Process and Fas
<u>Track Process</u>
3.4 [NOT USED]
3.5 Processing of Interconnection Requests Request
3.5.1 Initiating an Interconnection Request
3.5.2 Validation of Interconnection Request
3.6 Internet Posting
3.7 Coordination with Affected Systems
3.8 Withdrawal
3.9 Transferability of Interconnection Request
4 LARGE GENERATING INTERCONNECTION STUDY PROCESS 4.1 Criteria for Independent Study Process Eligibility
4.2 Determination of Electrical Independence

4.2.1 Flow Impact Test
4.2.2 Short Circuit Test

4.3 Scoping Meeting
4.4 System Impact Study
4.5 Facilities Study
4.6 Deliverability Assessment
4.7 Extension of Commercial Operation Date
<u>5 FAST TRACK PROCESS</u>
5.1 Applicability and Initiation of Fast Track Process Request
5.2 Initial Review
5.3 Screens
5.4 Customer Options Meeting
5.5 Supplemental Review
6 GENERATOR INTERCONENCTION STUDY PROCESS AGREEMENT
6.1 Generator Interconnection Study Process Agreement
6.2 Scoping Meeting
6.35 SCOPING MEETING
-6 INTERCONNECTION STUDIES
6.1 Grouping Interconnection Requests
6.42 Scope and Purpose of Phase I Interconnection Study
6.53 Identification and Cost Allocation Methods for Network Upgradesin Phase I Interconnection Study
in Phase I Interconnection Study
in Phase I Interconnection Study 6.53.1 Reliability Network Upgrades 6.53.2 Delivery Network Upgrades 6.5.2.1 The On-Peak Deliverability Assessment 6.5.2.2 Off-Peak Deliverability Assessment
in Phase I Interconnection Study 6.53.1 Reliability Network Upgrades 6.53.2 Delivery Network Upgrades 6.5.2.1 The On-Peak Deliverability Assessment 6.5.2.2 Off-Peak Deliverability Assessment 6.66.4 Use of Per Unit Costs to Estimate Network Upgrade Costs 6.7 I5 Phase I Interconnection-Study Costs Form the Basis of Interconnection
in Phase I Interconnection Study 6.53.1 Reliability Network Upgrades 6.53.2 Delivery Network Upgrades 6.5.2.1 The On-Peak Deliverability Assessment 6.5.2.2 Off-Peak Deliverability Assessment 6.66.4 Use of Per Unit Costs to Estimate Network Upgrade Costs 6.7 I5 Phase I Interconnection-Study Costs Form the Basis of Interconnection -Financial Security
in Phase I Interconnection Study 6.53.1 Reliability Network Upgrades 6.53.2 Delivery Network Upgrades 6.5.2.1 The On-Peak Deliverability Assessment 6.5.2.2 Off-Peak Deliverability Assessment 6.66.4 Use of Per Unit Costs to Estimate Network Upgrade Costs 6.7 15 Phase I Interconnection—Study Costs Form the Basis of Interconnection Financial Security 6.86 Phase I Interconnection Study Procedures
in Phase I Interconnection Study 6.53.1 Reliability Network Upgrades 6.53.2 Delivery Network Upgrades 6.5.2.1 The On-Peak Deliverability Assessment 6.5.2.2 Off-Peak Deliverability Assessment 6.66.4 Use of Per Unit Costs to Estimate Network Upgrade Costs 6.7 I5 Phase I Interconnection-Study Costs Form the Basis of Interconnection -Financial Security 6.86 Phase I Interconnection Study Procedures 6.9 Phase I Interconnection Study Results Meeting
in Phase I Interconnection Study 6.53.1 Reliability Network Upgrades 6.53.2 Delivery Network Upgrades 6.5.2.1 The On-Peak Deliverability Assessment 6.5.2.2 Off-Peak Deliverability Assessment 6.66.4 Use of Per Unit Costs to Estimate Network Upgrade Costs 6.7 Is Phase I Interconnection-Study Costs Form the Basis of Interconnection -Financial Security 6.86 Phase I Interconnection Study Procedures 6.9 Phase I Interconnection Study Results Meeting 6.97.1 Commercial Operation Date
in Phase I Interconnection Study 6.53.1 Reliability Network Upgrades 6.53.2 Delivery Network Upgrades 6.5.2.1 The On-Peak Deliverability Assessment 6.5.2.2 Off-Peak Deliverability Assessment 6.6.4 Use of Per Unit Costs to Estimate Network Upgrade Costs 6.7 15 Phase I Interconnection Study Costs Form the Basis of Interconnection Financial Security 6.86 Phase I Interconnection Study Procedures 6.9 Phase I Interconnection Study Results Meeting 6.97.1 Commercial Operation Date 6.97.2 Modifications
in Phase I Interconnection Study 6.53.1 Reliability Network Upgrades 6.53.2 Delivery Network Upgrades 6.52.1 The On-Peak Deliverability Assessment 6.5.2.2 Off-Peak Deliverability Assessment 6.6.4 Use of Per Unit Costs to Estimate Network Upgrade Costs 6.7 5 Phase I Interconnection Study Costs Form the Basis of Interconnection -Financial Security 6.86 Phase I Interconnection Study Procedures 6.9 Phase I Interconnection Study Results Meeting 6.97.1 Commercial Operation Date 6.97.2 Modifications 7 PHASE II INTERCONNECTION STUDY FOR QUEUE CLUSTERS
in Phase I Interconnection Study 6.53.1 Reliability Network Upgrades 6.53.2 Delivery Network Upgrades 6.5.2.1 The On-Peak Deliverability Assessment 6.5.2.2 Off-Peak Deliverability Assessment 6.66.4 Use of Per Unit Costs to Estimate Network Upgrade Costs 6.7 I5 Phase I Interconnection Study Costs Form the Basis of Interconnection -Financial Security 6.86 Phase I Interconnection Study Procedures 6.9 Phase7 I Interconnection Study Results Meeting 6.97.1 Commercial Operation Date 6.97.2 Modifications 7 PHASE II INTERCONNECTION STUDY FOR QUEUE CLUSTERS 7.1 Scope of Phase II Interconnection Study 7.2 Coordination of the Phase II Interconnection Study with the
in Phase I Interconnection Study 6.53.1 Reliability Network Upgrades6.53.2 Delivery Network Upgrades6.5.2.1 The On-Peak Deliverability Assessment6.5.2.2 Off-Peak Deliverability Assessment6.6-4 Use of Per Unit Costs to Estimate Network Upgrade Costs 6.7_15 Phase I Interconnection-Study Costs Form the Basis of Interconnection -Financial Security 6.86 Phase I Interconnection Study Procedures 6.9 Phase I Interconnection Study Results Meeting6.97.1 Commercial Operation Date6.97.2 Modifications 7 PHASE II INTERCONNECTION STUDY FOR QUEUE CLUSTERS 7.1 Scope of Phase II Interconnection Study 7.2 Coordination of the Phase II Interconnection Study with the Transmission Planning Process

7.6 Accelerated Phase II Interconnection Study Process

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

- **8 ADDITIONAL DELIVERABILITY ASSESSMENT OPTIONS**
- 8.1 One-Time Full Capacity Deliverability Option
- 8.2 Annual Full Capacity Deliverability Option
- 8 [NOT USED]
- 9 INTERCONNECTION FINANCIAL SECURITY
- 9.1 Types of Interconnection Financial Security
- 9.2 Initial Posting of Interconnection Financial Security
- 9.3 Second and Third Posting of Interconnection Financial Security
 - 9.3.1 Second Posting of Interconnection Financial Security.
 - 9.3.2 Third Posting of Interconnection Financial Security.
- 9.4 General Effect of Withdrawal of Interconnection Request or Termination of the GIALGIA on Interconnection Financial Security
 - 9.4.1 Conditions for Partial Recovery of Interconnection Financial Security

 Upon Withdrawal of Interconnection Request or Termination of GIALGIA
 - 9.4.2 Schedule for Determining Non-Refundable Portion of the Interconnection Financial Security for Network Upgrades

10 ENGINEERING & PROCUREMENT ("E&P") AGREEMENT

- 11-LARGE GENERATOR INTERCONNECTION AGREEMENT (GIALGIA)
- -11.1 Tender
 - 11.1.1 [No Subheading Title]
 - 11.1.2 [No Subheading Title]
- 11.2 Negotiation
- 11.3 Execution and Filing
- 11.4 Commencement of Interconnection Activities
- 11.5 Interconnection Customer to Meet Requirements of the Participating TO's Interconnection Handbook
- 12 <u>PTO's CONSTRUCTION OF PARTICIPATING TO'S INTERCONNECTION</u>
 FACILITIES AND NETWORK UPGRADES, AND FUNDING OF
 NETWORK UPGRADES
- 12.1 Schedule
- 12.2 Construction Sequencing
 - 12.2.1 General
 - 12.2.2 Construction of Network Upgrades that are or were an Obligation of an Entity other than the Interconnection Customer
 - 12.2.3 Advancing Construction of Network Upgrades that are Part of the CAISO's Transmission Plan
- 12.3 Network Upgrades
 - 12.3.1 Initial Funding
 - 12.3.2 Repayment of Amounts Advanced for Network Upgrades and Refund of Interconnection Financial Security

12.4 Special Provisions for Affected Systems and Other Affected Participating TOs

13 MISCELLANEOUS

13.1 Confidentiality

- 13.1.1 Scope
- 13.1.2 Release of Confidential Information
- 13.1.3 Rights
- 13.1.4 No Warranties
- 13.1.5 Standard of Care
- 13.1.6 Order of Disclosure
- 13.1.7 Remedies
- 13.1.8 Disclosure to FERC, its Staff, or a State
- 13.1.9 [No Subheading Title]
- 13.1.10 [No Subheading Title]
- 13.1.11 [No Subheading Title]

13.2 Delegation of Responsibility

- 13.3 [NOT USED]
- 13.4 [NOT USED]

13.5 Disputes

- 13.5.1 Submission
- 13.5.2 External Arbitration Procedures
- 13.5.3 Arbitration Decisions
- 13.5.4 Costs

13.6 Local Furnishing Bonds

- 13.6.1 Participating TOs That Own Facilities Financed by Local Furnishing Bonds
- 13.6.2 Alternative Procedures for Requesting Interconnection Service

13.7 Change in CAISO Operational Control

Appendix 1 Interconnection Request

Attachment A Generating Facility Data

Appendix 2 Large Generator Interconnection Procedures (GIPLGIP) Relating to the Transition Cluster

Appendix 3 Pro Forma Large Generator Interconnection Study Process Agreement for Queue Clusters(LGISPA)

Appendix A Assumptions in Phase I Interconnection Study Appendix B Data Form, Pre-Phase II Interconnection Study

Appendix 4 Agreement for Allocating GIPPro Forma Roles and Study Responsibilities Agreement

Attachment A Interconnection Study Responsibility Allocation

Attachment B Contacts for Notices

Appendix 5 — Schedule for Release and Review of Per Unit Costs

Appendix 6 Generator Interconnection Study Process Agreement for Independent Study Process

Appendix A Assumptions in System Impact Study

Appendix B Data Form, Pre-Facilities Study

Appendix 7 Application, Procedures & Terms for 10 kW Interverter Process

Appendix 8 Transition of Existing SGIP Interconnection Requests to the GIP

Appendix 9 Certification Codes and Standards

Appendix 10 Certification of Small Generator Equipment Packages

Section 1 Objectives And Definitions

1.1 Objectives And Applicability

The objective of this <u>GIPLGIP</u> is to implement the requirements for <u>both Small and</u> Large Generating Facility interconnections to the CAISO Controlled Grid. This <u>GIPLGIP</u> applies to Interconnection Requests <u>that are either: (i)</u> assigned to a Queue Cluster, (ii) included in the <u>Independent Study Process</u>, or (iii) included in the <u>Fast Track Process</u>, <u>Window</u> 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 GIPLGIP. References to GIPLGIP are to this Appendix Y.

1.2.2 __Special Definitions for this GIPLGIP.

-In this GIPLGIP, 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 GIPLGIP.
- -"Dispute Resolution" shall mean the procedure set forth in this GIPLGIP for resolution of a dispute between the Parties.

"Fast Track Process" shall mean the procedure for evaluating an Interconnection Request for a certified Small Generating Facility no larger than 5 MW that includes the GIP Section 5.3 screens, customer options meeting, and optional supplemental review.

- -"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.

"Independent Study Process" or "ISP" shall mean the procedure for evaluating an Interconnection Request for a Generating Facility independently of the process applicable to a Generating Facility assigned to a Queue Cluster or the Fast Track Process.

- -"Party" or "Parties" shall mean the CAISO, Participating TO(s), Interconnection Customer or the applicable combination of the above.
- -"Reasonable Efforts" shall mean, with respect to an action required to be attempted or taken by a Party under the Large-Generator Interconnection Procedures, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.
- -"Roles and Responsibilities Agreement" shall mean the Agreement for the Allocation of Responsibilities with Regard to Large Generator Interconnection Procedures and Interconnection Study Agreements, a pro forma version of which is attached to this GIPLGIP.

Section 2 Scope And Application

2.1 Application Of Generator Interconnection Procedures

Sections 2 through 13 of this GIPLGIP apply to processing an Interconnection Request pertaining to a Generating Facility that is either: (i) assigned to a Queue Cluster, (ii) included in the Independent Study Process, or (iii) included in the Fast Track Process, Window pursuant to the terms of this CAISO Tariff for the performance of its Interconnection Studies. Appendix 2 of this GIPLGIP sets forth exceptions to the provisions of this GIPLGIP that apply to processing an Interconnection Request pertaining to a Generating Facility that meets the criteria set forth in GIPLGIP Appendix 2.

2.2 Comparability

The CAISO shall receive, process, and analyze Interconnection Requests in a timely manner as set forth in this <u>GIPLGIP</u>. The CAISO will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers as set forth in this <u>GIPLGIP</u>, 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 Cluster Application Windows for the Interconnection Study Cycle, as well as all Generation reflected in the Interconnection Requests in the Independent Study Process that entered the CAISO's interconnection queue prior to the creation of the Base Case, along with any associated transmission upgrades or additionsQueue 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 Application Window for the Interconnection Study Cycle, and the identified preliminary transmission upgrades or additions, as well as all Generation reflected in the Interconnection Requests in the Independent Study Process that entered the CAISO's interconnection queue prior to the creation of the Base Case, along with any associated transmission upgrades or additions; (3) prior to the Phase II Interconnection Study, including all remaining Generation from the Phase I Interconnection Study for the Interconnection Study Cycle, as well as all Generation reflected in the Interconnection Requests in the Independent Study Process that entered the CAISO's interconnection queue prior to the creation of the Base Case, along with any associated transmission upgrades or additions; and (4) after the Phase II Interconnection Study, including all remaining Generation from the applicable Phase I Interconnection Study and the identified transmission upgrades and additions for the

Interconnection Study Cycle, as well as all Generation reflected in the Interconnection Requests in the Independent Study Process that entered the CAISO's interconnection queue prior to the creation of the Base Case, along with any associated transmission upgrades or additions.

-Interconnection Base Case Data shall not include information subject to the confidentiality provisions in GIPLGIP 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 as all requirements under 18 C.F.R. Section 388.113 for obtaining the release of Critical Energy Infrastructure Information (as that term is defined by FERC).

2.4 Interconnection Service And Studies

2.4.1 No Applicability to Transmission Service.

-Nothing in this <u>GIPLGIP</u> 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.

For Interconnection Requests in a Queue Cluster, the The Interconnection Studies consist of a Phase I Interconnection Study and a Phase II Interconnection Study. For Interconnection Requests processed under the Independent Study Process, the Interconnection Studies consist of a System Impact Study and a Facilities Study. The Interconnection Studies, 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 <u>Phase I and Phase II</u> Interconnection Studies for <u>Queue Cluster Generating Facilities</u> will also identify Delivery Network Upgrades for all <u>Generating Facilities</u>, including those being processed under the <u>Independent Study Process</u>, to allow the full output of a <u>Large</u> Generating Facility selecting Full Capacity Deliverability Status, and, as applicable, the maximum allowed output of the interconnecting <u>Large</u>-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 <u>GIPLGIP</u> Section 6.53.2.

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 <u>GIPLGIP</u>. The CAISO will forward a copy of the Interconnection Request to the applicable Participating TO within five (5three (3) Business Days of receipt.

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

3.2 Roles And Responsibilities

- (a) Each Interconnection Request will be subject to the direction and oversight of the CAISO. The CAISO will conduct or cause to be performed the required Interconnection Studies and any additional studies the CAISO determines to be reasonably necessary, and will direct the applicable Participating TO to perform portions of studies where the Participating TO has specific and non-transferable expertise or data and can conduct the studies more efficiently and cost effectively than the CAISO. The CAISO will coordinate with Affected System Operators in accordance with GIPLGIP Section 3.7.
- (b) The CAISO will complete or cause to be completed all studies as required within the timelines provided in this <u>GIPLGIP</u>. 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 <u>GIPLGIP</u>.
- (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 Timing for Submitting Interconnection Requests Queue Cluster Windows

3.3.1 Timing for Submitting Interconnection Requests in Queue Cluster

Except for Interconnection Customers requesting processing under the Independent Study Process or Fast Track Process, Interconnection Requests must be submitted during a Queue-Cluster Application Window. There will be 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 Application Windows associated with each Interconnection Study Cycle. The firstopening and closing dates as set forth in the Business Practice Manual.

Any changes to the Queue Cluster Application Window will open on October 15 and close on November 15 of the year prior to the year in which the Interconnection Studies are performed. The second Cluster Application Window will open on March 1 and close on March 31 of the year in which the Interconnection Studies are performed. In the event

that any date interval and opening or closing dates set forth in this section is not a the Business Day, then the applicable date Practice Manual shall be the next Business Day thereaftermade in accordance with CAISO Tariff Section 22.11.

For the CAISO's fourth Queue Cluster, there will only be one Cluster Application Window, which will open on March 1, 2011 and close on March 31, 2011.

3.3.2 Timing for Submitting Interconnection Requests for Independent Study Process and Fast Track Process

Interconnection Customers may submit Interconnection Requests for processing under the Independent Study Process or the Fast Track Process at any time during the year.

3.4 [Not Used]

3.5 Processing Oof Interconnection Requests

3.5.1 Initiating an Interconnection Request.

-To initiate an Interconnection Request, except as set forth in <u>GIPLGIP</u> Section 3.5.1.1, the Interconnection Customer must submit <u>all of the following</u> during a <u>Queue-Cluster Application</u> Window, or at any time during <u>all of the year for proposed Generating</u> Facilities applying for processing under the Independent Study Process:

- following: (i) An-a \$250,000 Interconnection Study Deposit equal to \$50,000 plus \$1,000 per MW of electrical output of the Generating Facility, up to a maximum of \$250,000. With respect to Interconnection Customers that have submitted Interconnection Requests: (1) if such customers, for whom the Phase I Interconnection Studies have not yet commenced, have posted an Interconnection Study Deposit that is less than the amount required by this section, such Interconnection Customers must post the difference between the amount posted and the amount required by this section within thirty (30) calendar days of a FERC order accepting this provision; (2) if such customers, for whom the Phase I Interconnection Studies have not yet commenced, have posted an Interconnection Study Deposit that is greater than the amount required by this section, such Interconnection Customers will receive a refund equal to the difference between the amount originally posted and the amount required under this section within thirty (30) calendar days of a FERC order accepting this provision.
- , (ii) Aa completed application in the form of GIPLGIP Appendix 1, including requested deliverability status, requested study process (either Queue Cluster or Independent Study Process), preferred Point of Interconnection and voltage level, and all other required technical data.
- , and (iii) Demonstration demonstration of Site Exclusivity or, for Interconnection Requests in a Queue Cluster, a posting of a Site Exclusivity Deposit of \$100,000 for a Small Generating Facility or \$250,000 for a. 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.

3.5.1.21 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 and to meet and otherwise communicate with Interconnection Customers with respect to their Interconnection Requests.

Except for proposed Generating Facilities processed under the Fast Track Process set forth in Section 5 of this GIP, the

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 GIPLGIP Section 3.8 on or before thirty (30) calendar days following the Scoping Meeting, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceed the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.
- (b) Should an Interconnection Request made under GIPLGIP Section 3.5.1 be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under GIPLGIP 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 (or the latest date permitted under this GIP for a Results Meeting if a customer elects not to have a Results Meeting) for the Phase I Interconnection Study or the System Impact Study for Generating Facilities processed under the Independent Study Process, 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, and Participating TOs, and third parties have incurred on the Interconnection Customer's behalf or one-half of the original Interconnection Study Deposit up to a maximum of \$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 GIPLGIP 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 (or the latest date permitted under this GIP for a Results Meeting if a customer elects not to have a Results Meeting) for the Phase I Interconnection Study, or the System Impact Study for proposed Generating Facilities processed under the Independent for the Phase I Interconnection Study Process, the Interconnection Study Deposit shall be non-refundable.
- e)-Upon execution of an GIALGIA by an Interconnection Customer, the CAISO and the applicable Participating TOs, or the approval by FERC of an unexecuted GIALGIA, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceeds the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.

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

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

3.5.1.23 Obligation for Study Costs.

-Except as otherwise provided in GIPLGIP Section 3.5.1.21, 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 Participating TO and any third parties performing work on the Interconnection Customer's behalf shall invoice the CAISO for such work, and the 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.

3.5.1.43 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 GIPLGIP 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 a GIAan LGIA or requests the filing of an unexecuted GIALGIA under GIPLGIP Section 11 if Site Exclusivity has not been demonstrated.

3.5.1.54 Proposed Commercial Operation Date.

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

3.5.2 Validation of Interconnection Request.

3.5.2.1 Acknowledgment of Interconnection Request.

-The CAISO shall notify the Interconnection Customer within ten (10six (6)) Business Days of receipt of the Interconnection Request, which notice shall state whether the Interconnection Request is deemed complete, valid, and ready to be studied. valid.

3.5.2.2 Deficiencies in Interconnection Request.

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 GIPLGIP 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 GIPLGIP Section 3.5.1 no later than twenty (20) Business Dayscalendar days after the close of the applicable Queue Cluster Application Window or ten (10) Business Dayscalendar 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 GIPLGIP Section 3.5.1 within twenty (20) Business Dayscalendar days after the close of the applicable Queue Cluster Application Window or ten (10) Business Dayscalendar days after the CAISO first provided notice that the Interconnection Request was not valid, whichever is later, will be deemed invalid and will not be included in Interconnection Study Cycle or otherwise studied...and will be deemed invalid.

-Interconnection Requests deemed invalid under this <u>GIPLGIP</u> Section 3.5.2.2 are not subject to <u>GIPLGIP</u> Section 3.8. Interconnection Customers with invalid Interconnection Request under this <u>GIPLGIP</u> Section 3.5.2.2 may seek relief under <u>GIPLGIP</u> 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; (viii) the type of Generating Facility to be constructed (e.g., combined cycle, combustion turbine, wind turbine, and fuel type); and (ix) requested deliverability status.

Except in the case of an Affiliate, the list will not disclose the identity of the Interconnection Customer until the Interconnection Customer executes a GIAan LGIA or requests that the applicable Participating TO(s) and the CAISO file an unexecuted GIALGIA 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 secure CAISO Website non-confidential portions of the Phase I Interconnection Study that do not contain customer-specific information following the final Results Meeting and non-confidential portions of the Phase II Interconnection Study that do not contain customer-specific information no later than publication of the final Transmission Plan under CAISO Tariff Section 24.2.5.2.

3.7 Coordination With Affected Systems

The CAISO will notify the Affected System Operators that are potentially affected by the Interconnection Customer's Interconnection Request or Group Study within which the Interconnection Customer's Interconnection Request will be studied. The CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System Operators, to the extent possible, and, if possible, the CAISO will include those results (if available) in its applicable Interconnection Study within the time frame specified in this GIPLGIP. The CAISO will include such Affected System Operators in all meetings held with the Interconnection Customer as required by this GIPLGIP. 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 GIPLGIP Section 3.5.2, if the Interconnection Customer fails to adhere to all requirements of this GIPLGIP, except as provided in GIPLGIP Section 13.5 (Disputes), the CAISO shall deem the Interconnection Request to be withdrawn and shall provide written notice to the Interconnection Customer within five (5) Business Days of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Upon receipt of such written notice, the Interconnection Customer shall have five (5) Business Days in which to respond with information or action that either cures the deficiency or supports its position that the deemed withdrawal was erroneous and notifies the CAISO of its intent to pursue Dispute Resolution.

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

-In the event of such withdrawal, the CAISO, subject to the provisions of <u>GIPLGIP</u> Sections 13.1 and 3.5.1.21, 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 Independent Study Process

The CAISO, in coordination with the applicable Participating TO(s), will study Interconnection Requests eligible for treatment under this Independent Study Process independently from other Interconnection Requests.

All provisions of this GIP will apply unless superseded by provisions in this GIP Section 4.

4.1 Criteria for Independent Study Process Eligibility

Any Interconnection Request that meets the following criteria will be processed under the Independent Study Process:

4.1.1 The Interconnection Customer must provide, along with its Interconnection Request, an objective demonstration that inclusion in a Queue Cluster will not accommodate the desired Commercial Operation Date for the Generating Facility. As part of this demonstration, the Interconnection Customer must show that the desired Commercial

Operation Date is physically and commercially achievable, by demonstrating at least two of the following:

- (i) The Interconnection Customer has obtained, or has demonstrated the ability to obtain, all regulatory approvals and permits needed to complete construction in time to meet the Generating Facility's requested Commercial Operation Date.
- (ii) The Interconnection Customer is able to provide, or has demonstrated the ability to obtain, a purchase order for generating equipment specific to the proposed Generating Facility, or a statement signed by an officer or authorized agent of the Interconnection Customer demonstrating that the Interconnection Customer has a commitment for the supply of its major generating equipment in time to meet the Commercial Operation Date through a purchase agreement to which the Interconnection Customer is a party.
- (iii) The Interconnection Customer can provide reasonable evidence of adequate financing or other financial resources necessary to make the Interconnection Financial Security postings required in Sections 9.2 and 9.3 of this GIP.
- 4.1.2 The Interconnection Customer must demonstrate Site Exclusivity.
- 4.1.3 The proposed Generating Facility must be electrically independent of Interconnection Requests included in an existing Queue Cluster, pursuant to GIP Section 4.2, and, in addition, must be electrically independent of any other Generating Facility that is currently being studied under an earlier-queued Independent Study Process Interconnection Request.
- 4.1.4 The CAISO will inform an Interconnection Customer whether it has satisfied the requirements set forth in Sections 4.1.1 and 4.1.2 of the GIP within fifteen (15) Business Days of receiving the Interconnection Request.
- 4.1.5 The CAISO will inform an Interconnection Customer whether it has satisfied the requirement that it be electrically independent of other Interconnection Requests, pursuant to Section 4.2 of the GIP, within fifteen (15) Business Days of receiving the Interconnection Request.
- 4.1.6 Any Interconnection Request that does not satisfy the criteria set forth in Sections 4.1.1,
 4.1.2, and 4.1.3 of the GIP shall be deemed withdrawn, without prejudice to the
 Interconnection Customer submitting a request at a later date, unless the Interconnection
 Customer notifies the CAISO in writing within ten (10) Business Days that it wishes the
 CAISO to hold the Interconnection Request for inclusion in the next Queue Cluster, in
 which event the CAISO will do so.

4.2 Determination of Electrical Independence

Each Interconnection Request submitted under the Independent Study Process must pass both the flow impact test and the short circuit test set forth in this GIP Section 4.2 in order to qualify for the Independent Study Process. The available power flow and short circuit Base Cases that are being used for the most recent Queue Cluster will be used as the starting Base Cases for these tests.

4.2.1 Flow Impact Test

The CAISO, in coordination with the applicable Participating TO(s), will perform the flow impact test for each Interconnection Request requesting to be processed under the Independent Study Process as follows:

- (i) Identify the transmission facility closest, in terms of electrical distance, to the proposed Point of Interconnection of the Generating Facility being tested that will be electrically impacted, either as a result of Network Upgrades identified or reasonably expected to be needed by Generating Facilities currently being studied in a Queue Cluster, or as a result of Network Upgrades identified or reasonably expected to be needed by earlier queued Generating Facilities currently being studied through the Independent Study Process. If the current Queue Cluster studies or earlier queued Independent Study Process studies have not yet determined which transmission facilities electrically impacted by the Generating Facility being tested require Network Upgrades, and the CAISO cannot reasonably anticipate whether such transmission facilities will require Network Upgrades from other data, then the CAISO will wait to conduct the independence analysis under this section until sufficient information exists in order to make this determination.
- (ii) The incremental power flow on the transmission facility identified in Section 4.2.1(i) that is caused by the Generating Facility being tested will be divided by the lesser of the Generating Facility's size or the transmission facility capacity. If the result is five percent (5%) or less, the Generating Facility shall pass the flow impact test. If the Generating Facility being tested is tested against the nearest transmission facility and that transmission facility has been impacted by a cluster that required an upgrade as a result of a contingency, then that contingency will be used when applying the flow impact test.
- (iii) If the Generating Facility being tested under the flow impact test is reasonably expected to impact transmission facilities that were identified, per Section 4.2.1 (i), when testing one or more earlier queued Generating Facilities currently being studied through the Independent Study Process, then an additional aggregate power flow test shall be performed on these earlier identified transmission facilities. The aggregate power flow test shall require that the aggregated power flow of the Generating Facility being tested, plus the flow of all earlier queued Generating Facilities currently being studied under the Independent Study Process that were tested against the transmission facilities described in the previous sentence, must be five (5) percent or less of those transmission facilities' capacity.

However, even if the aggregate power flow on any transmission facility tested pursuant to this section (iii) is greater than five (5) percent of the transmission facility's capacity but the incremental power flow as a result of the Generating Facility being tested is one (1) percent or less than of the transmission facility's capacity, the Generating Facility shall pass the test.

If the Generating Facility being tested is tested against the nearest transmission facility and that transmission facility has been impacted by a cluster that required an upgrade as a result of a contingency, then that contingency will be used when applying the flow impact test.

The Generating Facility being tested must pass both this aggregate test as well as the individual flow test described in Section 4.2.1 (ii), in no particular order.

If the short circuit contribution from the Generating Facility (existing or proposed) being tested at the transmission facility identified in GIP Section 4.2.1(i) is less than 100 amperes, the Generating Facility shall pass the short circuit test.

4.3 Scoping Meeting

Within five (5) Business Days after the CAISO notifies the Interconnection Customer that if the Generating Facility associated with its Interconnection Request has satisfied the independence test set forth in GIP Section 4.2, the CAISO shall establish a date agreeable to the Interconnection Customer and the applicable Participating TO(s) for the Scoping Meeting. With input from the Participating TO, the CAISO shall evaluate whether the Interconnection Request is at or near the boundary of an affected Participating TO(s)' service territory or of any other Affected System(s) so as to potentially affect such third parties, and, if such is the case, the CAISO shall invite the affected Participating TO(s) and/or Affected System Operator(s), in accordance with GIP Section 3.7, to the Scoping Meeting by informing such third parties, as soon as practicable, of the time and place of the scheduled Scoping Meeting.

The purpose of the Scoping Meeting shall be to discuss the Interconnection Request and review existing studies relevant to the Interconnection Request. The applicable Participating TO(s) and the CAISO will bring to the meeting, as reasonably necessary to accomplish its purpose, 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. The Interconnection Customer will bring to the Scoping Meeting, in addition to the technical data in Attachment A to GIP 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. The CAISO shall prepare minutes from the meeting, and provide an opportunity for other attendees and the Interconnection Customer to confirm the accuracy thereof. The Scoping Meeting may be omitted by agreement of the Interconnection Customer, Participating TO, and the CAISO.

The CAISO shall, no later than five (5) Business Days after the Scoping Meeting (or agreement to forego such Scoping Meeting), provide the Interconnection Customer with a Independent Study Process Study Agreement (in the form set forth in Appendix 6 to the GIP), which shall contain an outline of the scope of the system impact and facilities studies and a non-binding good faith estimate of the cost to perform the studies. The Interconnection Customer shall return the executed Independent Study Process Study Agreement or request an extension of time for good cause within thirty (30) Business Days thereafter, or the Interconnection Request shall be deemed withdrawn.

4.4 System Impact Study

- 4.4.1 The system impact study will consist of a short circuit analysis, a stability analysis, a power flow analysis, an assessment of the potential magnitude of financial impacts, if any, on Local Furnishing Bonds, and a proposed resolution, and any other studies that are deemed necessary.
- 4.4.2 The system impact study shall state the assumptions upon which it is based, state the results of the analyses, and provide the requirement or potential impediments to providing the requested Interconnection Service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the Interconnection.
- 4.4.3 The system impact study shall provide a list of Interconnection Facilities and Reliability

 Network Upgrades that are required as a result of the Interconnection Request along with

a non-binding good faith estimate of cost responsibility and the amount of construction time required. The good faith estimate will be based on the Per Unit Costs as described in GIP Section 6.6.

- 4.4.4 The system impact study will be completed and the results transmitted to the Interconnection Customer within ninety (90) calendar days after the execution of an Independent Study Process Study Agreement. The Interconnection Customer shall execute the agreement(s) and deliver them to the CAISO, and shall make its initial posting of Interconnection Financial Security, within thirty days (30) calendar days after being provided with the final system impact study report, in accordance with GIP Section 9.2, or its Interconnection Request shall be deemed withdrawn.
- 4.4.5

 If requested by the Interconnection Customer, a Results Meeting shall be held among the CAISO, the applicable Participating TO(s), and the Interconnection Customer to discuss the results of the system impact study report, including assigned cost responsibility. The CAISO shall prepare minutes from the meeting. Any such Results Meeting will be held within 20 Business Days of the date the system impact study report is provided to the Interconnection Customer.
- 4.4.6 For Interconnection Requests under the Independent Study Process, the initial posting of Interconnection Financial Security described in GIP Section 9.2 will be based on the cost responsibility for Network Upgrades, and Participating TO's Interconnection Facilities set forth in the system impact study. If the system impact study is waived, then such posting will be based upon the cost responsibility set forth in the facilities study described in GIP Section 4.5.

4.5 Facilities Study

- The facilities study shall specify and estimate the cost of the equipment, engineering, procurement, and construction work (including overheads) needed to implement the conclusions of the system impact study, including, if applicable, the cost of remedial measures that address the financial impacts, if any, on Local Furnishing Bonds. The facilities study shall also identify (1) the electrical switching configuration of the equipment, including, without limitation, transformer, switchgear, meters, and other station equipment, (2) the nature and estimated cost of the Participating TO's Interconnection Facilities and upgrades necessary to accomplish the Interconnection, and (3) an estimate of the time required to complete the construction and installation of such facilities or for effecting remedial measures that address the financial impacts, if any, on Local Furnishing Bonds.
- 4.5.2 The facilities study may be waived if the system impact study does not identify any Interconnection Facilities and Reliability Network Upgrades.
- 4.5.3 The facilities study will be completed within ninety (90) calendar days after the Interconnection Customer posts Interconnection Financial Security in accordance with GIP Section 9.2 where Network Upgrades are identified. In cases where no Network Upgrades are identified and the required facilities are limited to Interconnection Facilities only, the facilities study will be completed within sixty (60) calendar days after the Interconnection Customer posts Interconnection Financial Security in Accordance with GIP Section 9.2.
- 4.5.4 If requested by the Interconnection Customer within ten (10) Business Days of the date of the facilities study report, a Results Meeting shall be held among the CAISO, the applicable Participating TO(s), and the Interconnection Customer to discuss the results of the facilities study report, including assigned cost responsibility. The CAISO shall prepare minutes from the meeting. Any such Results Meeting will be held within twenty

(20) Business Days of the date the facilities study report is provided to the Interconnection Customer.

4.5.5 For Interconnection Requests under the Independent Study Process, the second posting and third postings of Interconnection Financial Security described in GIP Section 9.3 will be based on the cost responsibility for Network Upgrades and the Participating TO's Interconnection Facilities set forth in the facilities study.

4.6 Deliverability Assessment

Interconnection Customers under the Independent Study Process that request Full Capacity Deliverability Status will have a Deliverability Assessment performed as part of the next scheduled Phase I and Phase II Interconnection Studies for Queue Clusters. If the Deliverability Assessment identifies any Delivery Network Upgrades that are triggered by the Interconnection Request, the Interconnection Customer will be responsible to pay its proportionate share of the costs of those Upgrades, pursuant to Sections 6 and 7 of this GIP. If the Generating Facility achieves its Commercial Operation Date before the Deliverability Assessment is completed and any necessary Delivery Network Upgrades are in service, the proposed Generating Facility will be treated as an Energy-Only Deliverability Status Generating Facility until such Delivery Network Upgrades are in service.

4.7 Extensions of Commercial Operation Date

Extensions of the Commercial Operation Date for Interconnection Requests under the Independent Study Process will not be granted except for circumstances beyond the control of the Interconnection Customer.

Section 5 Fast Track Process

5.1 Applicability and Initiation of Fast Track Process Request

An Interconnection Customer may request interconnection of a proposed Generating Facility to the CAISO Controlled Grid under the Fast Track Process if the Generating Facility is no larger than 5 MW and if the Interconnection Customer's proposed Generating Facility meets the codes, standards, and certification requirements of Appendices 9 and 10 of this GIP, or if the applicable Participating TO notifies the CAISO that it has reviewed the design for or tested the proposed Small Generating Facility and has determined that the proposed Generating Facility may interconnect consistent with Reliability Criteria and Good Utility Practice.

To initiate an Interconnection Request under the Fast Track Process, the Interconnection Customer must provide the CAISO with:

- (i) a completed Interconnection Request as set forth in Appendix 1 to the GIP;
- (ii) a non-refundable processing fee of \$500 and a study deposit of \$1,000; and
- (iii) a demonstration of Site Exclusivity. For the Fast Track Process, such demonstration may include documentation reasonably demonstrating a right to locate the Generating Facility on real estate or real property improvements owned, leased, or otherwise legally held by another.

The CAISO shall review and validate the Fast Track Process Interconnection Request pursuant to GIP Section 5.2.

All provisions of this GIP will apply unless superseded by provisions in this GIP Section 5.

5.2 Initial Review

Within fifteen (15) Business Days after the CAISO notifies the Interconnection Customer that the Interconnection Request is deemed complete, valid, and ready to be studied, the applicable Participating TO shall perform an initial review using the screens set forth in GIP Section 5.3 below, shall notify the Interconnection Customer of the results, and shall include with the notification copies of the analysis and data underlying the Participating TO's determinations under the screens.

5.3 Screens

- 5.3.1 The proposed Generating Facility must pass the following screens to be eligible for Interconnection under this Fast Track Process:
- 5.3.1.1 The proposed Generating Facility's Point of Interconnection must be on the CAISO Controlled Grid.
- For interconnection of a proposed Generating Facility to a radial transmission circuit, the aggregated generation on the circuit, including the proposed Generating Facility, shall not exceed 15 percent of the line section annual peak load as most recently measured at the substation. For purposes of this GIP Section 5.3.1.2, a line section shall be considered as that portion of a Participating TO's electric system connected to a customer bounded by automatic sectionalizing devices or the end of the transmission line.
- For interconnection of a proposed Generating Facility to the load side of spot network protectors, the proposed Generating Facility must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of 5 percent of a spot network's maximum load or 50 kW. For purposes of this GIP Section 5.3.1.3, a spot network shall be considered as a type of distribution system found in modern commercial buildings for the purpose of providing high reliability of service to a single retail customer.
- 5.3.1.4 The proposed Generating Facility, in aggregation with other generation on the transmission circuit, shall not contribute more than 10 percent to the transmission circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of change of ownership.
- 5.3.1.5 The proposed Generating Facility, in aggregate with other generation on the transmission circuit, shall not cause any transmission protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or Interconnection Customer equipment on the system to exceed 87.5 percent of the short circuit interrupting capability; nor shall the interconnection proposed for a circuit that already exceeds 87.5 percent of the short circuit interrupting capability.
- 5.3.1.6 The Generating Facility, in aggregate with other generation interconnected to the transmission side of a substation transformer feeding the circuit where the Generating Facility proposes to interconnect shall not exceed 10 MW in an area where there are known, or posted, transient stability limitations to generating units located in the general electrical vicinity (e.g., three or four transmission busses from the Point of Interconnection).
- 5.3.2 If the proposed interconnection passes the screens and no Upgrades are reasonably anticipated, the Interconnection Request shall be approved. Within fifteen (15) Business Days thereafter, the Participating TO will provide the Interconnection Customer with a Small Generator Interconnection Agreement for execution.

- If the proposed interconnection fails the screens and no Upgrades are reasonably anticipated, but the CAISO and Participating TO determine that the Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards under these procedures, the Participating TO shall, within fifteen (15) Business Days, provide the Interconnection Customer with a Small Generator Interconnection Agreement for execution.
- 5.3.4 If the proposed interconnection passes the screens and Upgrades are reasonably anticipated, the CAISO and Participating TO shall provide the Interconnection Customer with the opportunity to attend a customer options meeting as described in GIP Section 5.4.

5.4 Customer Options Meeting

If the CAISO and Participating TO determine the Interconnection Request cannot be approved without modifications at minimal cost; or a supplemental study or other additional studies or actions; or at significant cost to address safety, reliability, or power quality problems, within the five (5) Business Day period after the determination, the CAISO and Participating TO shall notify the Interconnection Customer and provide copies of all data and analyses underlying its conclusion. Within ten (10) Business Days of the CAISO and Participating TO's determination, the CAISO and Participating TO shall offer to convene a customer options meeting with the CAISO and Participating TO to review possible Interconnection Customer facility modifications or the screen analysis and related results, to determine what further steps are needed to permit the Small Generating Facility to be connected safely and reliably. At the time of notification of the CAISO and Participating TO's determination, or at the customer options meeting, the CAISO and Participating TO shall:

- 5.4.1 Offer to perform facility modifications or modifications to the Participating TO's electric system (e.g., changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the limited cost to make such modifications to the Participating TO's electric system; or
- 5.4.2 Offer to perform a supplemental review if the CAISO and Participating TO concludes that the supplemental review might determine that the Generating Facility could continue to qualify for interconnection pursuant to the Fast Track Process, and provide a non-binding good faith estimate of the costs of such review; or
- 5.4.3 Obtain the Interconnection Customer's agreement to continue evaluating the
 Interconnection Request under the Independent Study Process or Cluster Study Process.

5.5 Supplemental Review

If the Interconnection Customer agrees to a supplemental review, the Interconnection Customer shall agree in writing within fifteen (15) Business Days of the offer, and submit a deposit for the estimated costs in an amount reasonably determined by the CAISO and Participating TO. The Interconnection Customer shall be responsible for the CAISO and Participating TO's actual costs for conducting the supplemental review. The Interconnection Customer must pay any review costs that exceed the deposit within twenty (20) Business Days of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced costs, the CAISO and Participating TO will return such excess, without interest, within twenty (20) Business Days of the invoice.

- Within ten (10) Business Days following receipt of the deposit for a supplemental review,
 the CAISO and Participating TO will determine if the Small Generating Facility can be interconnected safely and reliably.
- 5.5.1.1 If so, then, within fifteen (15) Business Days of such a determination, the Participating

 TO shall forward a Small Generator Interconnection Agreement to the Interconnection

 Customer for execution.

- If so, and Interconnection Customer facility modifications are required to allow the

 Generating Facility to be interconnected consistent with safety, reliability, and power
 quality standards, the Participating TO shall forward a Small Generator Interconnection
 Agreement to the Interconnection Customer for execution within fifteen (15) Business
 Days after confirmation that the Interconnection Customer has agreed to pay for the
 identified modifications to the Participating TO's electric system.
- If so, and Upgrades to the Participating TO's electric system are required to allow the Small Generating Facility to be interconnected consistent with safety, reliability, and power quality standards, the Participating TO shall forward a Small Generator Interconnection Agreement to the Interconnection Customer for execution within fifteen (15) Business Days that requires the Interconnection Customer to pay the costs of such system modifications prior to interconnection.
- 5.5.2 If not, the Interconnection Request will be deemed withdrawn, without prejudice to the Interconnection Customer resubmitting its Interconnection Request for processing in either a Queue Cluster or under the Independent Study Process.

Section 6 Interconnection Study Process for Queue Clusters

The provisions of this Section 6 of this GIP shall apply to all Interconnection Requests except those processed under the Independent Study Process as set forth in Section 4 of this GIP, the Fast Track Process as set forth in Section 5 of this GIP, or the 10 kW inverter process as set forth in Appendix 7 of this GIP.

6.1 Large Generator Interconnection Study Process Agreement

Within thirty (30) calendar days of the close of athe-Queue Cluster Application Window, the CAISO shall provide to each Interconnection Customer with a valid Interconnection Request received during the Queue-Cluster Application Window a pro forma Large Generator Interconnection Study Process Agreement in the form set forth in Appendix 3 of this GIPLGIP. 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 GIP.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.

6.2 Scoping Meeting

Within five (5) Business Days after the CAISO notifies the Interconnection Customer of a valid-Interconnection Request that is complete, valid, and ready for study, 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 athe Queue Cluster Application Window, unless otherwise mutually agreed upon by the Parties. The CAISO shall evaluatedetermine whether the Interconnection Request is at or near the boundary of an affected Participating TO(s) service territory or of any other Affected System(s) so as to potentially affect such third parties, and, in.—If such casea determination is made, the

CAISO shall invite the affected Participating TO(s), and/or Affected System Operator(s) in accordance with GIPLGIP Section 3.7, to the Scoping Meeting by informing such third parties of the time and place of the scheduled Scoping Meeting as soon as practicable.

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

The Interconnection Customer will bring to the Scoping Meeting, in addition to the technical data in Attachment A to GIPLGIP 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, and provide verified by the Interconnection Customer and the other attendees an opportunity to confirm the accuracy thereof, 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

6.43 Grouping Interconnection Requests

At the CAISO's option, and in coordination with the applicable Participating TO(s), an Interconnection RequestsRequest received during the two Cluster Application Windows for a particular yearQueue 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 twosame Queue Cluster Application Windows for a particular year Window.

-An Interconnection Request's inclusion in a Group Study will not relieve the CAISO or Participating TO(s) from meeting the timelines for conducting the Phase I Interconnection Study provided in the GIPLGIP. 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.

6.24 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 two-Queue Cluster Application Windows for a particular year-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 GIPLGIP Section 6.53, 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 GIPLGIP Section 6.53.2. 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).

6.5 Identification And Cost Allocation for Network Upgrades

6.53.1 Reliability Network Upgrades.

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

The cost of all Reliability Network Upgrades identified in the Phase I Interconnection Study shall be estimated in accordance with GIPLGIP Section 6.64. The estimated costs of short circuit related 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 short circuit duty contribution of each Large Generating Facility.— The estimated costs of all other 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. 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.

6.53.2 Delivery Network Upgrades.

6.53.2.1 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 GIPLGIP Section 6.97.2 or change the Interconnection Request's Full Capacity Deliverability Status for purposes of financing under GIPLGIP Section 12.3.1.

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

-The cost of all Delivery Network Upgrades identified in the On-Peak Deliverability Assessment as part of a Phase I Interconnection Study shall be estimated in accordance with GIPLGIP 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.

6.53.2.2 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 GIPLGIP Section 6.97.2 or change the Interconnection Request's Full Capacity Deliverability Status for purposes of financing under GIPLGIP 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 GIPLGIP Section 6.64. The estimated costs of Delivery Network Upgrades identified in the Off-Peak Deliverability Assessment shall be assigned to each Interconnection Request included in the Group Study or studied individually based on the flow impact of each such LCRIG on the Delivery Network Upgrades as determined by the Generation distribution factor methodology set forth in the Off-Peak Deliverability Assessment methodology.

6.46 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 Each Participating TO, under the direction of the CAISO, shall publish per unit costs for facilities generally required to interconnect Generation to their respective systems.

-These per unit costs shall reflect the anticipated cost of procuring and installing such facilities during the current Interconnection Study Cycle, and may vary among Participating TOs and within a Participating TO Service Territory based on geographic and other cost input differences, and should include an annual adjustment for the following ten (10) years to account for the anticipated timing of procurement to accommodate a potential range of Commercial Operation Dates of Interconnection Requests in the Interconnection Study Cycle. The per unit costs will be used to develop the cost of Reliability Network Upgrades, Delivery Network Upgrades and Participating TO's Interconnection Facilities under this GIPLGIP 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 GIPLGIP.

6.57 Phase I Study Costs Form Basis Of Financial Security

The costs assigned to Interconnection Customers for Network Upgrades under this Section 6 of the GIPLGIP shall establish the maximum value for the Interconnection Financial Security required from each Interconnection Customer under GIPLGIP 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 GIPLGIP are estimates only that establish the basis for the initial Interconnection Financial Security required from each Interconnection Customer under GIPLGIP Section 9.2.

6.68 Phase I Interconnection Study Procedures

The CAISO shall coordinate the Phase I Interconnection Study with applicable Participating TO(s) pursuant to GIPLGIP Section 3.2 and any Affected System that is affected by the Interconnection Request pursuant to GIPLGIP 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 commence the Phase I Interconnection Study by June 1 of each year, and to complete and publish to Interconnection Customers the Phase I Interconnection Study report withinat a maximum within two hundred forty (240) Calendar Days after the close of the Queue Cluster Window and approximately one hundred thirty-four (134) days after the annual commencement of eighty Calendar Days after the Phase Ifinal 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 two associated Queue Cluster Application Windows Window, study complexity, and reasonable availability of subcontractors as provided under GIPLGIP Section 13.2. The CAISO will share applicable study results with the applicable Participating TO(s) for review and comment and will incorporate comments into the study report. The CAISO will issue a final Phase I Interconnection Study report to the Interconnection Customer. At the time of completion of the Phase I Interconnection Study, the CAISO may, at the Interconnection Customer's request, determine whether the provisions of GIPLGIP 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 two-associatedQueue Cluster Application WindowsWindow, 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 GIPLGIP Section 13.1.

6.97 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. The CAISO shall prepare the minutes from the meetings, and provide the Interconnection Customer and the other attendees an opportunity to confirm the accuracy thereof.

6.97.1 _Commercial Operation Date.

-At the Results Meeting, the Interconnection Customer shall provide a schedule outlining key milestones including environmental survey start date, expected environmental permitting submittal date, expected procurement date of project equipment, back-feed date for project construction, and expected project construction date. This will assist the parties in determining if Commercial Operation Dates are reasonable. If major Interconnection Customer's Interconnection Facilities for the Large Generating Facility have been identified in the Phase I Interconnection Study, such as telecommunications equipment to support a possible Special Protection System (SPS), distribution feeders to support back feed, new substation, and/or expanded substation work, permitting and material procurement lead times may result in the need to alter the proposed Commercial Operation Date. The Parties may agree to a new Commercial Operation Date. In addition, where an Interconnection Customer intends to establish Commercial Operation separately for different Electric Generating Units or project phases at its Generating Facility, it may only do so in accordance with an implementation plan agreed to in advance by the CAISO and Participating TO, which agreement shall not be unreasonably withheld. Where the parties cannot agree, the Commercial Operation Date determined reasonable by the CAISO, in coordination with the applicable Participating TO(s), will be used for the Phase II Interconnection Study where the changed Commercial Operation Date is needed to accommodate the anticipated completion, assuming Reasonable Efforts by the applicable Participating TO(s), of necessary Reliability Network Upgrades and/or Participating TO's Interconnection Facilities, pending the outcome of any relief sought by the Interconnection Customer under GIPLGIP 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 GIPLGIP Section 13.5.

6.97.2 Modifications.

_ _

6.97.2.1

- At any time 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.
- At the Phase I Interconnection Study Results Meeting, the Interconnection Customer should be prepared to discuss any desired modifications to the Interconnection Request. After the publication of the final Phase I Interconnection Study, but no later than five (5) Business Days following the Phase I Interconnection Study 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.

-Modifications permitted under this Section 6.97.2 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.

For any modification other than these, 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 GIPLGIP Section 6.97.2, shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

-The Interconnection Customer shall remain eligible for the Phase II Interconnection Study if the modifications are in accordance with this GIPLGIP Section 6.97.2.

Section 7 Phase II Interconnection Study for Queue Clusters

The provisions of this Section 7 of this GIP shall apply to all Interconnection Requests except those processed under the Independent Study Process, as set forth in Section 4 of this GIP, the Fast Track Process, as set forth in Section 5 of this GIP, or the 10 kW inverter process as set forth in Appendix 7 of this GIP.

7.1 Scope Of Phase II Interconnection Study

Within five (5) Business Days following the Phase I Interconnection Study 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 Controlled Grid to implement the conclusions of the updated Phase II Interconnection Study technical analyses in accordance with Good Utility Practice to physically and electrically connect the Interconnection Customer's Interconnection Facilities to the CAISO Controlled Grid. The Phase II Interconnection Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Participating TO's Interconnection Facilities and Network Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities.

7.2 Phase II Study Coordinated To Transmission Planning Process

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

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

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

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

7.3 Financing Of Reliability Network Upgrades

The responsibility to finance final Reliability Network Upgrades identified in the Phase II Interconnection Study of an Interconnection Request studied separately shall be assigned solely to that Interconnection Request up to the cost assignment for Reliability Network Upgrades under GIPLGIP Section 6.53.1. The responsibility to finance final short circuit related 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 short circuit duty contribution of each Large Generating Facility up to the cost assignment for Reliability Network Upgrades under GIPLGIP Section 6.53.1. The responsibility to finance all other 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 GIPLGIP Section 6.53.1.

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 GIPLGIP Sections 6.53.2.1 and 6.53.2.2.

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 GIPLGIP 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 commence the Phase II Interconnection Study by January 15 of each year, and to complete and publish to Interconnection Customers the Phase II Interconnection Study report within onethree hundred ninety-six (196thirty (330)) calendar days after the annual commencement from January 1 of the Phase II Interconnection Studyeach 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 GIPLGIP Section 13.1.

7.6 Accelerated Phase II Interconnection Study Process

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

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

7.7 Meeting With The CAISO And Applicable Participating TO(s)

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

Section 8 Additional Deliverability Assessment Options[Not Used]

8.1 One-Time Full Capacity Deliverability Option

- 8.1.1 A Large Generating Facility previously studied as Energy-Only Deliverability Status under the CAISO Tariff, or a Small Generating Facility studied under the provisions of Appendix S of the CAISO Tariff, will have a one-time option to be studied for Full Capacity Deliverability Status.
- 8.1.2 An Interconnection Customer must make such election within the Cluster Application Window for the CAISO's fourth Queue Cluster, which will open on March 1, 2011.
- 8.1.3 Any Interconnection Customers selecting this option will be studied as part of the Phase I and Phase II Interconnection Studies for the CAISO's fourth Queue Cluster.
- 8.1.4 Interconnection Customers electing this one-time option will be required to post a study deposit in the amount set forth in Section 3.5.1 of this GIP, less any study deposit amounts already paid if the Interconnection Customer's Generating Facility is still in the CAISO's interconnection queue.

8.2 Annual Full Capacity Deliverability Option

- A Generating Facility previously studied as Energy-Only Deliverability Status under the CAISO Tariff, or a Small Generating Facility studied under the provisions of Appendix S of the CAISO Tariff will have an annual option to be studied to determine whether it can be designated for Full Capacity Deliverability Status using available transmission capacity. An Interconnection Customer must make such a request within a Cluster Application Window, beginning with the Cluster Application Window for the CAISO's fifth Queue Cluster, which will open on March 1, 2012.
- 8.2.2 Any Interconnection Customer selecting this option will be studied immediately following the Phase II Interconnection Studies associated with the Queue Cluster during which the Interconnection Customer submits its request, typically June through August annually.
- 8.2.3 Interconnection Customers that wish to participate in this annual process must submit an Interconnection Request as set forth in Appendix 1 to the GIP along with a nonrefundable \$10,000 study fee.
- 8.2.4 After allocating transmission system capability, including capability associated with both existing capability and capability relating to approved transmission upgrades, to Interconnection Customers in the Queue Cluster who originally requested Full Capacity Deliverability Status in the Phase II Interconnection Study, the CAISO will perform additional studies using the deliverability study procedures set forth in Section 6.5.2 of this GIP to determine the availability of any remaining transmission system capability for to those Interconnection Customers requesting Full Capacity Deliverability Status as part of the annual process described in this Section 8.
 - 8.2.4.1 In determining available transmission capability, priority will be given to

 Interconnection Customers whose Generating Facilities have the lowest transfer distribution factors, calculated according to the deliverability study procedures set forth in Section 6.5.2 of this GIP.
 - 8.2.4.2 If there is sufficient available transmission capability for the Interconnection

 Customer to deliver the full output of its Generating Unit, then the Interconnection

 Customer's Generating Facility will be considered to have Full Capacity

 Deliverability Status.
 - 8.2.4.3 If the assessment of available transmission capability conducted under this GIP

 Section 8.2.4 indicates that there is some transmission capacity available for use
 by the Interconnection Customer, but less than is necessary to deliver the full
 output of the Interconnection Customer's Generating Facility, then the
 Interconnection Customer's Generating Facility will be considered to be partially
 deliverable, and the amount of transmission capability made available to that
 Interconnection Customer's Generating Facility will be equal to the determination
 of available transmission capability for the Generating Facility rounded down to
 the nearest 50 MW increment.
- 8.3 To the extent that a Participating TO's tariff provides the option for customers taking interconnection service under the Participating TO's tariff to obtain Full Capacity Deliverability Status, the ISO will, in coordination with the applicable Participating TO, perform the necessary deliverability studies to determine the deliverability of customers electing such option. The CAISO shall execute any necessary agreements for reimbursement of study costs it incurs and to assure cost attribution for any Network Upgrades relating to any deliverability status conferred to such customers under the Participating TO's tariff.

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):

- 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);
- (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 GIPLGIP Section 9.1, the Interconnection Customer shall provide to the applicable Participating TO(s) replacement Interconnection Financial Security meeting the requirements of this GIPLGIP 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 applicable Participating TO(s) in an interest-bearing escrow account under subpart (d) of this GIPLGIP 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

9.2.1 The Interconnection Customer shall post, with notice to the CAISO, two separate Interconnection Financial Security instruments: (i) a posting relating to the Network Upgrades; (ii) a posting relating to the Participating TO's Interconnection Facilities.

- 9.2.2 Timing of Postings. The postings set forth in this GIP Section 9.2 shall be made on On or before ninety (90) calendar days after publication of the final Phase I Interconnection Study report for, Interconnection Customers in a Queue Cluster, or on or before sixty (60) calendar days after the CAISO provides the results of the System Impact Study for Interconnection Customers in the Independent Study Process.
- **9.2.3** Posting Amount for Network Upgrades.

First, Each Interconnection Customer for a Small Generating Facility assigned to a Queue Cluster ander each Interconnection Customer for a Small Generating Facility in the Independent Study Process shall post an Interconnection Financial Security instrument in an amount equal to the lesser of fifteen percent (15%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Network Upgrades or (ii) \$20,000 per megawatt of electrical output of the Small 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, including any requested modifications thereto, but in no event less than \$50,000.

Eachthe Interconnection Customer for a Large Generating Facility assigned to a Queue Cluster and each Interconnection Customer for a Large Generating Facility in the Independent Study Process shall post an Interconnection Financial Security instrument in an amount equal to the lesser of (i) fifteen percent (15%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Network Upgrades, (ii) \$20,000 per megawatt of electrical output of the 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, including any requested modifications thereto, or (iii) \$7,500,000, but in no event less than \$500,000.

Notwithstanding the foregoing, if the costs of the estimated Network Upgrades are less than the minimum posting amounts set forth above, the posting amount required will be equal to the estimated Network Upgrade amount.

In addition, if an Interconnection Customer switches its status from Full Capacity
Deliverability Status to Energy-Only Deliverability Status within five (5) Business Days
following the Phase I Interconnection Study Results Meeting, as permitted in Section 7.1
of this GIP, the required Interconnection Financial Security for Network Upgrades shall,
for purposes of this section, be additionally capped at an amount no greater than the total
cost responsibility assigned to the Interconnection Customer in the Phase I
Interconnection Study for Reliability Network Upgrades.

The Interconnection Customer shall also post an Interconnection Financial Security

- 9.2.4 Posting Amount for Participating TO's Interconnection Facilities. The Interconnection Customer shall also post an Interconnection Financial Security instrument in the amount of twenty percent (20%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for the Participating TO's Interconnection Facilities.
- 9.2.5 Consequences for Failure to Post. The failure by an Interconnection Customer to timely post 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. The Interconnection Customer shall provide the CAISO and the Participating TO with written notice that it has posted the required Interconnection Financial Security no later than the applicable final day for posting.

9.3 Additional Posting Of Interconnection Financial Security

9.3.1 Second Posting of Interconnection Financial Security.

- 9.3.1.1 -The Interconnection Customer shall make second postings, with notice to the CAISO, of two separate Interconnection Financial Security instruments: (i) a second posting relating to the Network Upgrades; (ii) a second posting relating to the Participating TO's Interconnection Facilities.
- 9.3.1.2 Timing of Posting. The postings in this GIP Section 9.3.1 shall be made On-on or before one hundred eighty (180) calendar days after publication of the final Phase II Interconnection Study report for Interconnection Customers in a Queue Cluster, or on or before one hundred twenty (120) calendar days after the CAISO provides the results of the Facilities Study for Interconnection Customers in the Independent Studythe Interconnection Customer shall post, with notice to the CAISO, two separate Interconnection Financial Security instruments.

First, Each Interconnection Customer for a Small Generating Facility assigned to a Queue Cluster and each Interconnection Customer for a Small Generating Facility in the Independent Study Process shall post an Interconnection Financial Security instrument such that the total Interconnection Financial Security posted by the Interconnection Customer for Network Upgrades equals the lesser of (i) \$1 million or (ii) thirty percent (30%) of the total cost responsibility assigned to the Interconnection Customer for Network Upgrades in either the final Phase I Interconnection Study, final Phase II Interconnection Study, System Impact Study, or Facilities Study, whichever is lower. In no event shall the total amount posted be less than \$100,000.

Eachthe Interconnection Customer for a Large Generating Facility assigned to a Queue Cluster and each Interconnection Customer for a Large Generating Facility in the Independent Study Process shall post an Interconnection Financial Security instrument such that the total Interconnection Financial Security posted by the Interconnection Customer for Network Upgrades equals the lesser of (i) \$15 million or (ii) thirty percent (30%) of the total cost responsibility assigned to the Interconnection Customer for Network Upgrades in either the final Phase I Interconnection Study, final Phase II Interconnection Study, System Impact Study, or Facilities Study, whichever is lower. In no event shall the total amount posted but in no event be less than \$500,000.

Notwithstanding the foregoing, if the costs of the estimated Network Upgrades are less than the minimum posting amounts set forth above, the posting amount required will be equal to the estimated Network Upgrade amount.

- 9.3.1.3

 -Posting Amount for Participating TO's Interconnection Facilities. -The Interconnection Customer shall also post an Interconnection Financial Security instrument such that the total Interconnection Financial Security posted by the Interconnection Customer for Participating TO Interconnection Facilities equals thirty percent (30%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase II Interconnection Study for Participating TO's Interconnection Facilities.
- 9.3.1.4 Early Commencement of Construction Activities. —If the start date for Construction Activities of Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer is prior to one hundred eighty (180) calendar days after publication of the final Phase II Interconnection Study report for Interconnection Customers in a Queue Cluster or prior to one hundred twenty (120) calendar days after publication of the final Facilities Study report for Interconnection Customers in the Independent Study Process, that start date must be set forth in the Interconnection Customer's GIALGIA, and the Interconnection Customer shall make its second posting of

Interconnection Financial Security pursuant to GIPLGIP Section 9.3.2 rather than GIPLGIP Section 9.3.1.

9.3.1.5 Consequences for Failure to Post -The failure by an Interconnection Customer to timely post the Interconnection Financial Security required by this GIPLGIP Section 9.3.1 shall constitute grounds for termination of the GIALGIA pursuant to GIALGIA Article 2.3.

9.3.2 Third Posting of Interconnection Financial Security.

-On or before the start of Construction Activities for Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer, whichever is earlier, the Interconnection Customer shall modify the two separate Interconnection Financial Security instruments posted pursuant to GIPLGIP Section 9.3.1 as follows. With respect to the Interconnection Financial Security Instrument for Network Upgrades, the Interconnection Customer shall modify this Instrument so that it equals one hundred percent (100%) of the total cost responsibility assigned to the Interconnection Customer for Network Upgrades in either the final Phase I Interconnection Study or Phase II Interconnection Study for Interconnection Customers in a Queue Cluster, or the final System Impact Study, or Facilities Study for Interconnection Customers in the Independent Study Process, whichever is lower, whichever is lower, but in no event less than \$500,000. With respect to the Interconnection Financial Security Instrument for Participating TO Interconnection Facilities, the Interconnection Customer shall modify this instrument so that it equals one hundred percent (100%) of the total cost responsibility assigned to the Interconnection Customer for Participating TO Interconnection Facilities in the final Phase II Interconnection Study for Interconnection Customers in a Queue Cluster, or the final Facilities Study for Interconnection Customers in the Independent Study Process.

The failure by an Interconnection Customer to timely post the Interconnection Financial Security required by this <u>GIPLGIP</u> Section 9.3.2 shall constitute grounds for termination of the <u>GIALGIA</u> pursuant to <u>GIALGIA</u> Article 2.3.

9.4 Effect Of Withdrawal Or Termination On Financial Security

Except as set forth in GIPLGIP Section 9.4.1, withdrawal of an Interconnection Request or termination of a GIAan 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 GIPLGIP Section 12.3 exceeds the total cost responsibility for Network Upgrades assigned to the Interconnection Customer by the final Phase I or Phase II Interconnection Study, whichever is lower, or in the governing study for the Independent Study Process, the applicable Participating TO(s) shall remit to the Interconnection Customer the excess amount.

Withdrawal of an Interconnection Request or termination of <u>a GIAan LGIA</u> 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 GIALGIA

-A portion of the Interconnection Financial Security shall be released to the Interconnection Customer, consistent with <u>GIPLGIP</u> Section 9.4.2, if the withdrawal of the Interconnection Request or termination of the <u>GIALGIA</u> 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 GIALGIA, the Interconnection Customer demonstrates to the CAISO that it has failed to secure an acceptable power purchase agreement for the Energy or capacity of the Large-Generating Facility after a good faith effort to do so. A good faith effort can be established by demonstrating participation in a competitive solicitation process or bilateral negotiations with an entity other than an Affiliate that progressed, at minimum, to the mutual exchange by all counter-parties of proposed term sheets.
- (b) Failure to Secure a Necessary Permit. At the time of withdrawal of the Interconnection Request or termination of the <u>GIALGIA</u>, 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 <u>Large</u>-Generating Facility.
- (c) Increase in the Cost of Participating TO's Interconnection Facilities. The Interconnection Customer withdraws the Interconnection Request or terminates the GIALGIA 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 GIALGIA 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 For Queue Cluster Generating Facilities or up to One Hundred Twenty Days After Final Facilities Study Report for Independent Study Process Generating Facilities.

-If, at any time after the initial posting of the Interconnection Financial Security for Network Upgrades under GIPLGIP 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 for Interconnection Customers in a Queue Cluster, or on or before one hundred twenty (120) days after the date of issuance of the results of the Facilities Study for Interconnection Customers in the Independent Study Process, the Interconnection Customer withdraws the Interconnection Request or terminates the GIALGIA, as applicable, in accordance with GIPLGIP Section 9.4.1, the applicable Participating TO(s) shall liquidate the Interconnection Financial Security for Network Upgrades under GIPLGIP Section 9.2 and reimburse the Interconnection Customer in an amount of (i) any

posted amount less fifty percent (50%) of the value of the posted Interconnection Financial Security for Network Upgrades (with a maximum of \$10,000 per requested and approved megawatt value of the Generating Facility Capacity at the time of withdrawal being retained by the Participating TO(s)), or, (ii) if the Interconnection Financial Security has been drawn down to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer, the lesser of the remaining balance of the Interconnection Financial Security or the amount calculated under (i) above. If the Interconnection Customer has separately provided capital apart from the Interconnection Financial Security to finance Pre-Construction Activities for Network Upgrades, the applicable Participating TO(s) will credit the capital provided as if drawn from the Interconnection Financial Security and apply (ii) above.

9.4.2.2 Between One Hundred Eighty-One Days After Final Phase II Interconnection Study Report or Facilities Study Results and the Commencement of Construction Activities.

-If, at any time between one hundred eighty-one (181) calendar days after the date of issuance of the final Phase II Interconnection Study report for Interconnection Customers in a Queue Cluster, or the date of issuance of the final Facilities Study Report for Interconnection Customers in the Independent Study Process, and the commencement of Construction Activities for either Network Upgrades or Participating TO's Interconnection Facilities, the Interconnection Customer withdraws the Interconnection Request or terminates the GIALGIA, as applicable, in accordance with GIPLGIP Section 9.4.1, the applicable Participating TO(s) shall liquidate the Interconnection Financial Security for Network Upgrades under GIPLGIP Section 9.3 and reimburse the Interconnection Customer in an amount of (i) any posted amounts less fifty percent (50%) of the value of the posted Interconnection Financial Security for Network Upgrades (with a maximum of \$20,000 per requested and approved megawatt value of the Generating Facility Capacity at the time of withdrawal being retained by the Participating TO(s)), 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 [Not Used]

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 GIPLGIP Section 9.3, the Interconnection Customer withdraws the Interconnection Request or terminates the GIALGIA, as applicable, in accordance with GIPLGIP Section 9.4.1(b), and the Delivery Network Upgrades to be financed by the Interconnection Customer under GIPLGIP Section 7.3 are also to be financed by one or more other Interconnection Customers, then GIPLGIP Section 9.4.2.1 shall apply, except that the Interconnection Customer shall not be reimbursed for its share of any actual costs incurred or irrevocably committed by the applicable Participating TO(s) for Construction Activities.

9.4.2.5 After Commencement of Construction Activities.

-Except as otherwise provided in GIPLGIP 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 GIALGIA by the Interconnection Customer will be treated in accordance with this GIPLGIP Section 9.4.

9.4.2.6 Notification to CAISO and Accounting by Applicable Participating TO(s).

-The applicable Participating TO(s) shall 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) shall 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 GIPLGIP Section 9.4. All non-refundable portions of the Interconnection Financial Security remitted to the CAISO in accordance with this GIPLGIP 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 <u>a GIAan LGIA</u>, 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 <u>GIPLGIP</u>. The E&P Agreement is an optional procedure. The E&P Agreement shall provide for the Interconnection Customer to pay the cost of all activities authorized by the Interconnection Customer and to make advance payments or provide other satisfactory security for such costs.

The Interconnection Customer shall pay the cost of such authorized activities and any cancellation costs for equipment that is already ordered for its interconnection, which cannot be mitigated as hereafter described, whether or not such items or equipment later become unnecessary. If the Interconnection Customer withdraws its application for interconnection or either Party terminates the E&P Agreement, to the extent the equipment ordered can be canceled under reasonable terms, the Interconnection Customer shall be obligated to pay the associated cancellation costs. To the extent that the equipment cannot be reasonably canceled, the applicable Participating TO(s) may elect: (i) to take title to the equipment, in which event the applicable Participating TO(s) shall refund the Interconnection Customer any amounts paid by Interconnection Customer for such equipment and shall pay the cost of delivery of such equipment, or (ii) to transfer title to and deliver such equipment to the Interconnection Customer, in which event the Interconnection Customer shall pay any unpaid balance and cost of delivery of such equipment.

Section 11 Generator Interconnection Agreement (GIA)

11.1 Tender

11.1.1

Within thirty (30) Calendar Days after the CAISO provides the final Phase II Interconnection Study report, or the Facilities Study report (or System Impact Study report if the Facilities Study is waived) to the Interconnection Customer, the applicable Participating TO(s) and the CAISO shall tender a draft GIALGIA, together with draft appendices. The draft GIALGIA shall be in the form of the FERC-approved form of LGIA set forth in CAISO Tariff Appendix T, Appendix Z, or Appendix CC, as applicable. 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 GIPLGIP 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 GIALGIA, as appropriately modified.

11.2 Negotiation

Notwithstanding GIPLGIP 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 GIALGIA 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 GIALGIA for not more than ninety (90) calendar days after the CAISO provides the Interconnection Customer with the final Phase II Interconnection Study report, or the Facilities Study report (or System Impact Study report if the Facilities Study is waived).- 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 GIALGIA pursuant to GIPLGIP Section 11.1 and request submission of the unexecuted GIALGIA with FERC or initiate Dispute Resolution procedures pursuant to GIPLGIP 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 GIALGIA 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 GIALGIA, requested filing of an unexecuted GIALGIA, or initiated Dispute Resolution procedures pursuant to GIPLGIP 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 GIALGIA within fifteen (15) Business Days after the completion of the negotiation process.

11.3 Execution And Filing

The Interconnection Customer shall either: (i) execute the appropriate number of originals of the tendered GIALGIA 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 a GIAan LGIA in unexecuted form. The GIALGIA shall be considered executed as of the date that all three Parties have signed the GIALGIA. As soon as practicable, but not later than ten (10) Business Days after receiving either the executed originals of the tendered GIALGIA (if it does not conform with a FERC-approved standard form of interconnection agreement) or the request to file an unexecuted GIALGIA, the applicable Participating TO(s) and CAISO shall file the GIALGIA 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 GIALGIA. An unexecuted GIALGIA 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 GIALGIA, they may proceed pending FERC action.

11.4 Commencement Of Interconnection Activities

If the Interconnection Customer executes the final <u>GIALGIA</u>, the applicable Participating TO(s), CAISO and the Interconnection Customer shall perform their respective obligations in accordance with the terms of the <u>GIALGIA</u>, subject to modification by FERC. Upon submission of an unexecuted <u>GIALGIA</u>, the Interconnection Customer, applicable Participating TO(s) and CAISO may proceed to comply with the unexecuted <u>GIALGIA</u>, pending FERC action.

11.5 Interconnection Customer To Meet PTO Handbook Requirements

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 PTO's Interconnection Facilities And Network Upgrades

12.1 Schedule

The applicable Participating TO(s) and the Interconnection Customer shall negotiate in good faith concerning a schedule for the construction of the applicable Participating TO's Interconnection Facilities and the Network Upgrades.

12.2 Construction Sequencing

12.2.1 General

In general, the sequence of construction of Stand Alone Network Upgrades or other Network Upgrades for a single Interconnection Request, or Network Upgrades identified for the interconnection of Generating Facilities associated with multiple Interconnection Requests, shall be determined, to the maximum extent practical, in a manner that accommodates the proposed Commercial Operation Date set forth in the GIALGIA 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 <u>a GIAan LGIA</u> under this <u>GIPLGIP</u>, 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 GIALGIA (or its equivalent predecessor agreement) or unexecuted GIALGIA (or its equivalent predecessor agreement) filed with FERC, but the Network Upgrades will not otherwise be completed because such GIALGIA 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 GIALGIA (or its equivalent predecessor agreement) or unexecuted GIALGIA (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 <u>GIALGIA</u> (or its equivalent predecessor agreement).

The obligation under this GIPLGIP Section 12.2.2 arises only after the CAISO, in coordination with the applicable Participating TO(s), determines that the Network Upgrades remain needed to support the interconnection of the Interconnection Customer's Generating Facility notwithstanding, as applicable, the absence or delay of the Generating Facility that is contractually, or was previously contractually, associated with the Network Upgrades.

Further, to the extent the timing of such Network Upgrades was not accounted for in determining a reasonable Commercial Operation Date among the CAISO, applicable Participating TO(s), and the Interconnection Customer as part of the Phase II Interconnection Study, the applicable Participating TO(s) will use Reasonable Efforts to ensure that the construction of such Network Upgrades can accommodate the Interconnection Customer's proposed Commercial Operation Date. If, despite Reasonable Efforts, it is anticipated that the Network Upgrades cannot be constructed in time to accommodate the Interconnection Customer's proposed Commercial Operation Date, the Interconnection Customer may commit to pay the applicable Participating TO(s) any costs associated with expediting construction of the Network Upgrades to meet the original proposed Commercial Operation Date. The expediting costs under this GIPLGIP Section 12.2.2 shall be in addition to the Interconnection Customer's cost responsibility assigned under GIPLGIP Section 6.53.

12.2.3 _Advancing Construction of Network Upgrades that are Part of the CAISO's Transmission Plan

-An Interconnection Customer with <u>a GIAan LGIA</u>, in order to maintain its In-Service Date as specified in the <u>GIALGIA</u>, may request that the CAISO and applicable Participating TO(s) advance to the extent necessary the completion of Network Upgrades that: (i) are necessary to support such In-Service Date and (ii) would otherwise not be completed, pursuant to an approved CAISO Transmission Plan covering the PTO Service Territory of the applicable Participating TO(s), in time to support such In-Service Date. Upon such request, the applicable Participating TO(s) will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay the applicable Participating TO(s) any associated expediting costs. The Interconnection Customer shall be entitled to refunds, if any, in accordance with this GIPLGIP and the GIALGIA, 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 GIPLGIP 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 GIPLGIP Sections 7.3 and 7.4.

- (a) Where the funding responsibility for any Reliability Network Upgrade or Delivery Network Upgrade has been assigned to a single Interconnection Customer in accordance with this GIPLGIP, 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 GIALGIA Article 12.1 up to a maximum amount no greater than that established by the cost responsibility assigned to each Interconnection Customer(s) under GIPLGIP 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 GIPLGIP, 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 GIALGIA 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 GIPLGIP 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 GIPLGIP, 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 GIALGIA 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 GIPLGIP Section 7.4.

Any permissible extension of the Commercial Operation Date of a Large Generating Facility will not alter the Interconnection Customer's obligation to finance Network Upgrades where the Network Upgrades are required to meet the earlier Commercial Operation Date(s) of other Large Generating Facilities that have also been assigned cost responsibility for the Network Upgrades.

12.3.2 Repayment of Amounts Advanced for Network Upgrades and Refund of Interconnection Financial Security

Upon the Commercial Operation Date of the Large-Generating Facility, which shall be the Commercial Operation Date of the entire-Large Generating Facility, if phased, the Interconnection Customer shall be entitled to a repayment for the Interconnection Customer's contribution to the cost of Network Upgrades in accordance with its cost responsibility assigned under GIPLGIP Sections 7.3 and 7.4. Such amount shall be paid to the Interconnection Customer by the applicable Participating TO(s) on a dollar-for-dollar basis either through (1) direct payments made on a levelized basis over the five-year period commencing on the Large-Generating Facility's Commercial Operation Date;

or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years of the Commercial Operation Date. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment. The Interconnection Customer may assign such repayment rights to any person.

Instead of direct payments, the Interconnection Customer may elect to receive Merchant Transmission Congestion Revenue Rights (CRRs) in accordance with the CAISO Tariff Section 36.11 associated with the Network Upgrades, or portions thereof that were funded by the Interconnection Customer. Such CRRs would take effect upon the Commercial Operation Date of the Large-Generating Facility, which shall be the Commercial Operation Date of the entire Large-Generating Facility, if phased, in accordance with the GIALGIA.

12.4 Special Provisions For Affected Systems, Other Affected PTOs

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 GIALGIA, as appropriately modified.

-Any repayment by the owner of the Affected System shall be in accordance with FERC Order No. 2003-B (109 FERC ¶ 61,287).

Section 13 Miscellaneous

13.1 Confidentiality

Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Parties receiving the information that the information is confidential.

If requested by any Party, the other Parties shall provide in writing, the basis for asserting that the information referred to in this Section warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

The confidentiality provisions of this <u>GIPLGIP</u> are limited to information provided pursuant to this <u>GIPLGIP</u>.

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 GIALGIA; or (6) is required, in accordance with GIPLGIP 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 GIPLGIP. 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. Part 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 GIPLGIP 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 GIPLGIP Section 13.1.

13.1.3 Rights

-Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Parties. The disclosure by each Party to the other Parties of Confidential Information shall not be deemed a waiver by a Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

13.1.4 No Warranties

-By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to the other Parties nor to enter into any further agreements or proceed with any other relationship or joint venture.

13.1.5 Standard of Care

-Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under these procedures or its regulatory requirements.

13.1.6 Order of Disclosure

-If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Parties with prompt notice of such request(s) or requirement(s) so that the other Parties may seek an appropriate protective order or waive compliance with the terms of the GIPLGIP.

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 GIPLGIP 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 GIPLGIP 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 GIPLGIP Section 13.1, but shall be in addition to all other remedies available at law or in equity. Further, the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this GIPLGIP Section 13.1.

13.1.8 Disclosure to FERC, its Staff, or a State

-Notwithstanding anything in this GIPLGIP 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 GIPLGIP, 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. Sectionsection 388.112, request that the information be treated as confidential and nonpublic 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. Sectionsection 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 GIPLGIP 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 GIPLGIP or as a transmission service provider or a Balancing Authority including disclosing the Confidential Information to an RTO or ISO or to a subregional, regional or national reliability organization or planning group. The Party asserting confidentiality shall notify the other Parties in writing of the information it claims is confidential. Prior to any disclosures of another Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to

protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

- 13.1.10 This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a breach of this provision).
- 13.1.11 The Participating TO or CAISO shall, at the Interconnection Customer's election, destroy, in a confidential manner, or return the Confidential Information provided at the time of Confidential Information is no longer needed.

13.2 Delegation Of Responsibility

The CAISO and the Participating TOs may use the services of subcontractors as deemed appropriate to perform their obligations under this GIPLGIP. 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 GIPLGIP. 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 GIPLGIP Section 3.8, the CAISO will forward any information regarding the disputed withdrawal received under GIPLGIP Section 3.8 within one (1) Business Day to the GIPLGIP Executive Dispute Committee, consisting of the Vice President responsible for administration of this GIPLGIP, the CAISO Vice President responsible for customer affairs, and an additional Vice President. The GIPLGIP Executive Dispute Committee shall have five (5) Business Days to determine whether or not to restore the Interconnection Request. If the GIPLGIP 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 <u>GIPLGIP</u> Section 3.8, arising out of or in connection with this <u>GIPLGIP</u> 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 <u>GIPLGIP</u> 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 GIALGIA, the GIPLGIP, 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 GIALGIA and GIPLGIP.

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 GIPLGIP Section 13.5, the terms of this GIPLGIP 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 GIALGIA and GIPLGIP and shall have no power to modify or change any provision of the GIALGIA and GIPLGIP in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

13.5.4 Costs

-Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

13.6 Local Furnishing Bonds

13.6.1 Participating TOs That Own Facilities Financed by Local Furnishing Bonds

-This provision is applicable only to a Participating TO that has financed facilities for the local furnishing of electric energy with Local Furnishing Bonds. Notwithstanding any other provisions of this GIPLGIP, the Participating TO and the CAISO shall not be required to provide Interconnection Service to the Interconnection Customer pursuant to this GIPLGIP and the GIALGIA 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 GIPLGIP and the GIALGIA.

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 GIALGIA to the Interconnection Customer but the Interconnection Customer has neither executed the GIALGIA nor requested the filing of an unexecuted GIALGIA with FERC, unless otherwise provided, the Interconnection Customer must complete negotiations with the applicable former Participating TO or successor entity which has the ownership of the Point of Interconnection.

Appendix 1 Interconnection Request INTERCONNECTION REQUEST

-Provide three co	pies of this completed form pursuant to Section 7 of this GIPLGIP Appendix 1 below.
Generati Fa	ersigned Interconnection Customer submits this request to interconnect its Large ng Facility with the CAISO Controlled Grid pursuant to the CAISO Tariff_(check one):- ast Track Process. dependent Study Process. dependent Study Process. dependent Cluster process. ne-Time Deliverability Assessment pursuant to GIP Section 8.1. annual Deliverability Assessment pursuant to GIP Section 8.
A	rconnection Request is for (check one): proposed new Large-Generating Facility. n increase in the generating capacity or a Material Modification to an existing Generating Facility.
	ed Deliverability Status is for (check one): apacity (For Independent Study Process and Queue Cluster Process only) (Note – Deliverability analysis for Independent Study Process is conducted with the next annual Cluster Study – See GIP Section 4.6) y Only
a/s i	Connection Customer provides the following information: 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: GPS Coordinates:
<u>t</u> r Maximul	Maximum net megawatt electrical output (as defined by section 2.c of Attachment A to his appendix) of the proposed new Large-Generating Facility or the amount of net negawatt increase in the generating capacity of an existing Generating Facility; m net megawatt electrical output (Net-MW): or awatt increase (Net-MW):

Type of project (i.e., gas turbine, hydro, wind, etc.) and general description of the equipment configuration (if more than 1 type is chosen include net MW for each);

c.

		Cogeneration
		Photovoltaic (MW) Combined Cycle (MW)
		Other (please describe):
	Gener d.	ral description of the equipment configuration (e.g. number, size, type, etc): Proposed In-Service Date (first date transmission is needed to the facility), Trial Operation date and Commercial Operation Date by day, month, and year and term of service (dates must be sequential);
	-Propo	sed In-Service Date:
	Propo	sed Trial Operation dDate:
	e.	Name, address, telephone number, and e-mail address of the Interconnection Customer's contact person (primary person who will be contacted);
		Name: Title: Company Name: Street Address: City, State: Zip Code: Phone Number: Fax Number: Email Address: Interconnection DUNS Number: DUNS Number: DUNS Number:
	f.	Approximate location of the proposed Point of Interconnection (i.e., <u>specify transmission facility</u> interconnection point <u>name</u> , voltage level, and the location of interconnection); and
	g.	Interconnection Customer data (set forth in Attachment A)
		-The Interconnection Customer shall provide to the CAISO the technical data called for in GIPLGIP Appendix 1, Attachment A. Three (3) copies are required.
5.	to CAIS	able deposit amount as specified in the LGIP made payable to California ISO. Send check SO (see section 7 for details) along with the: dix 1 to LGIP (Interconnection Request) for processing. ment A to Appendix 1 (Interconnection Request Large Generating Facility Data).

Evidence of Site Exclusivity as specified in the LGIP and name(s), <a href="address(ad

6.

	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 <code>LGIP</code>
7.	This Interconnection Request shall be submitted to the <u>CAISO</u> 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:
Ī	Legal name of the Interconnection Customer:
	By (signature):
	Name (type or print):
	Title:
	Date:

Attachment A Generating Facility Data -To GIPLGIP Appendix 1 Interconnection Request

LARGE GENERATING FACILITY DATA

Provide three copies of this completed form pursuant to Section 7 of GIPLGIP 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 and photovoltaic generator plantsfarms, 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.

	enerating Facility Information Total Generating Facility rated output (kWMW):
-B	Generating Facility auxiliary Load (kWMW):
-C	Project net capacity (A-B)(kWMW):
-D	Standby Load when Generating Facility is off-line (kWMW):
-E	Number of Generating Units:
	Number of Generating Units:
-F.	Individual generator rated output (kMW for each unit):
	Manufacturer:
-H	Year Manufactured:
	Nominal Terminal Voltage (kV):
-J.	Rated Power Factor (%):
-K	Type (Induction, Synchronous, D.C. with Inverter):
	Phase (3three phase or single phase):
-M	Connection (Delta, Grounded WYE, Úngrounded WYE, impedance grounded):
-N	Generator Voltage Regulation Range (+/- %):
	Generator Power Factor Regulation Range:
-P	For combined cycle plants, specify the plant net output capacity (MW) for an outage of
	the steam turbine or an outage of a single combustion turbine:
-S	ynchronous Generator – General Information:
	lease repeat the following for each generator model)
-A	Rated Generator speed (rpm):
-B	Rated MVA:
-C	Rated Generator Power Factor:
-D	Generator Efficiency at Rated Load (%):
-E	Moment of Inertia (including prime mover):
-F	Inertia Time Constant (on machine base) H: sec or MJ/MVA
-G	SCR (Short-Circuit Ratio - the ratio of the field current required for rated open-circuit
	voltage to the field current required for rated short-circuit current):
-H	Please attach generator reactive capability curves.

	IRated Hydrogen Cooling Pressure in psig (Steam Units only): JPlease 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.		
	itation System Information eat the following for each generator <u>model</u>)		
-B. ₋ -C. -D. -E.	Indicate the Manufacturer and Type of excitation system used for the generator. For exciter type, please choose from 1 to 89 below or describe the specific excitation system. -(1) Rotating DC commutator exciter with continuously acting regulator. The regulator power source is independent of the generator terminal voltage and current. -(2) Rotating DC commentator exciter with continuously acting regulator. The regulator power source is bus fed from the generator terminal voltage(3) Rotating DC commutator exciter with non-continuously acting regulator (i.e., regulator adjustments are made in discrete increments)(4) Rotating AC Alternator Exciter with non-controlled (diode) rectifiers. The regulator power source is independent of the generator terminal voltage and current (not bus-fed)(5) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers. The regulator power source is fed from the exciter output voltage(6) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers(7) Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from the generator terminal voltage(8) Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from a combination of generator terminal voltage and current (compound-source controlled rectifiers system. (9) Other (specify): Attach a copy of the block diagram of the excitation system from its instruction manual. The diagram should show the input, output, and all feedback loops of the excitation system. Excitation system response ratio (ASA):		
-(Ple PSS for u -A -B	ver System Stabilizer Information ease repeat the following for each generator model. All new generators are required to install sunless an exemption has been obtained from WECC. Such an exemption can be obtained units that do not have suitable excitation systems.) Manufacturer: Is the PSS digital or analog?		
-C. ₋ -D. ₋	Note the input signal source for the PSS? Bus frequency Shaft speed Bus Voltage Other (specify source) 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. Other comments regarding the PSS?		

ne-Governor Information se repeat the following for each generator model) e complete Part A for steam, gas or combined-cycle turbines, Part B for hydro turbines for both. Steam, gas or combined-cycle turbines:
e complete Part A for steam, gas or combined-cycle turbines, Part B for hydro turbines for both.
for both.
_Steam, gas or combined-cycle turbines:
-(1)List type of unit (Steam, Gas, or Combined-cycle):
-High pressure turbine or steam turbine:% _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 penstock, at gate, to the water level):ft -(5)Is the water supply run-of-the-river or reservoir:(6)Water flow rate at the typical maximum head:ft3/sec -(7)Average energy rate:kW-hrs/acre-ft -(8)Estimated yearly energy production:kW-hrs
Complete this section for each machine, independent of the turbine type. -(1)Turbine manufacturer:

7. Synchronous Generator and Associated Equipment – Dynamic Models:

For each generator, governor, exciter and power system stabilizer, select the appropriate dynamic model from the General Electric PSLF Program Manual and provide the required input data. The manual is available on the GE website at www.gepower.com. Select the following links within the website: 1) Our Businesses, 2) GE Power Systems, 3) Energy Consulting, 4) GE PSLF Software, 5) GE PSLF User's Manual.

There are links within the GE PSLF User's Manual to detailed descriptions of specific models, a definition of each parameter, a list of the output channels, explanatory notes, and a control system block diagram. The block diagrams are also available on the CAISO Website.

If you require assistance in developing the models, we suggest you contact General Electric. Accurate models are important to obtain accurate study results. Costs associated with any changes in facility requirements that are due to differences between model data provided by the generation developer and the actual generator test data, may be the responsibility of the generation developer.

	generation developer and the actual generator test data, may be the responsibility of the generation developer.
<u>7.</u>	Induction Generator Data:
	 -ARated Generator Power Factor at rated load: -BMoment of Inertia (including prime mover): -CDo you wish reclose blocking? Yes, No -Note: Sufficient capacitance may be on the line now, or in the future, and the generator may self-excite unexpectedly.
8.	
-Gene	rator Short Circuit Data
	-For each generator model, provide the following reactances expressed in p.u. on the generator base:
	 X"1 – positive sequence subtransient reactance:p.u** X2_X"2 – negative sequence subtransient reactance:p.u** X0_X"0 – zero sequence subtransient reactance:
	-Generator Grounding (select 1 for each model):
	A Solidly grounded B Grounded through an impedance (Impedance value in p.u on generator base. R:_:p.u. X::
9.	Step-Up Transformer Data
	-For each step-up transformer, fill out the data form provided in Table 1.
<u>10.</u>	Interconnection Facilities 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:
Nomin	al Voltage_ Voltage (kV) : kV
	ength (miles) : <u>miles</u> ermination Points:
Condu	tor Type: Size:
If bund	lled. Number per phase:, Bundle spacing:in.
Phase	Configuration. Vertical:, Horizontal:
Phase	Spacing-(ft): A-B:ft, B-C:ft, C-A:ft
	ce of lowest conductor to Ground at full load and 40 C:oft
	d Wire Type: Size: Distance to Ground:ft
Attach	Tower Configuration Diagram

Posit Posit Zero Zero	mer line ratings in amperes (normal and emergency) tive Sequence Resistance (R): p.u.** (for entire line length) tive Sequence Reactance: (X): p.u** (for entire line length) Sequence Resistance (R0): p.u.** (for entire line length) Sequence Reactance: (X0): p.u** (for entire line length)			
** Or 	Charging (B/2): p.u** n 100-MVA and nominal line voltage (kV) Base			
<u>10a.</u>	For Wind/photovoltaic plants, provide collector System Equivalence Impedance Data Provide values for each equivalence collector circuit at all voltage levels.			
Sumi Posit Posit Zero Zero Line	inal Voltage: mer line ratings in amperes (normal and emergency) tive Sequence Resistance (R1):			
<u>11.</u> -Wind	d Generators			
	-Number of generators to be interconnected pursuant to this Interconnection Request:			
	- <u>Average Site Elevation:</u> Single Phase Three Phase			
	-Inverter manufacturer, model name, number, and version:			
	-List of adjustable set_points for the protective equipment or software:			
	-Field Volts:Field Amperes:Motoring Power (kWMW):Neutral Grounding Resistor (If Applicable):I22t or K (Heating Time Constant):Rotor Resistance:Stator Resistance:Stator Reactance:Rotor Reactance:Magnetizing Reactance:Short Circuit Reactance:Exciting Current:Exciting Current:Temperature Rise:Design Letter:Reactive Power Required In Vars (No Load):Reactive Power Required In Vars (Full Load):Total Rotating Inertia. H:Per Unit on 100 KMVA 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.

12. Load Flow and Dynamic Models:

Provide load flow model for the generating plant and its interconnection facilities in GE PSLF*.epc format, including new buses, generators, transformers, interconnection facilities. An equivalent model is required for the plant with generation collector systems. This data should reflect the technical data provided in this Attachment A.

For each generator, governor, exciter and power system stabilizer, select the appropriate dynamic model from the General Electric PSLF Program Manual and provide the required input data. The manual is available on the GE website at www.gepower.com. Select the following links within the website: 1) Our Businesses, 2) GE Power Systems, 3) Energy Consulting, 4) GE PSLF Software, 5) GE PSLF User's Manual. Include any user written *.p EPCL files to simulate inverter based plants' dynamic responses (typically needed for inverter based PV/wind plants). Provide a completed *.dyd file that contains the information specified in this section.

There are links within the GE PSLF User's Manual to detailed descriptions of specific models, a definition of each parameter, a list of the output channels, explanatory notes, and a control system block diagram. The block diagrams are also available on the CAISO Website.

If you require assistance in developing the models, we suggest you contact General Electric. Accurate models are important to obtain accurate study results. Costs associated with any changes in facility requirements that are due to differences between model data provided by the generation developer and the actual generator test data, may be the responsibility of the generation developer.

-TABLE 1

TRANSFORMER DATA (Provide for each level of transformation)

UNIT	
NUMBER OF TRANSFORMERS	PHASE

RATING	H Winding	X Winding	Y Winding
Rated MVA			
Connection (Delta, Wye, Gnd.)			
Cooling Type (OA,OA/FA, etc) :			
Temperature Rise Rating			
Rated Voltage			
BIL			
Available Taps (% of rating)			
Load Tap Changer? (Y or N)			
Tap Settings			
IMPEDANCE	H-X	H-Y	X-Y
Percent			
MVA Base			
Tested Taps			
WINDING RESISTANCE	Н	Х	Υ
Ohms			
CURRENT TRANSFORMER RATIOS		1	

CURRENT	TRANSFORMER RATIOS		
H	X	Y	N
	Percent exciting current at 100	0 % Voltage;	110% Voltage
Supply copy of nameplate and manufacture's test report when available			

Appendix 2 LGIP Relating To The Transition Cluster Large Generator Interconnection Procedures (LGIP) Relating to the Transition Cluster

-Section 1. ___Objective, Applicability and Definitions

-1.1 Objective and Applicability

-The objective of this Appendix 2 to the Large Generator Interconnection Procedures (LGIP) is to implement the requirements for interconnecting to the CAISO Controlled Grid those Generating Facilities assigned to the Transition Cluster. All Interconnection Requests assigned to the Transition Cluster shall be deemed to have been assigned to a Queue Cluster Window for purposes of LGIP Section 1.1 and therefore all provisions of the LGIP apply to Generating Facilities included in the Transition Cluster, except as set forth herein.

-1.2 Definitions

-1.2.1 Master Definitions Supplement and Other General Definition Rules

-Unless the context otherwise requires, any word or expression defined in the Master Definitions Supplement, Appendix A to the CAISO Tariff, shall have the same meaning where used in this Appendix 2 to the LGIP. Further, unless the context otherwise requires, any word or expression defined in LGIP Section 1.2 shall have the same meaning where used in this Appendix 2 to the LGIP. References to LGIP in this Appendix 2 are to Appendix Y of the CAISO Tariff.

-1.2.2 _Special Definitions for this LGIP Appendix 2

- -In this Appendix 2 to the LGIP, the following words and expressions shall have the meanings set opposite them:
- -"Serial Study Group" shall mean the collection of valid Interconnection Requests with an assigned Queue Position on or before June 1, 2008 studied in accordance with the interconnection procedures set forth in the version of the LGIP set forth in CAISO Tariff Appendix U as permitted by the decision of FERC in Docket No. ER08-960-000.
- -"Transition Cluster" shall mean the collection of valid Interconnection Requests with an assigned Queue Position on or before June 1, 2008 that were not included as part of the Serial Study Group by the decision of FERC in Docket No. ER08-960-000.
- -"Transition Cluster Interconnection Study Deposit" shall mean, for each Interconnection Request in the Transition Cluster other than those subject to Section 3.2 of this Appendix 2 to the LGIP, the difference between (i) \$250,000 and (ii) the total amount the Interconnection Customer has been charged for Interconnection Studies performed under an Interconnection Feasibility Study Agreement, Interconnection System Impact Study Agreement, or Interconnection Facilities Study Agreement, 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.

Queue Position

-The Queue Position of any Interconnection Request included in the Transition Cluster shall be deemed to be lower than that of any Interconnection Request included in the Serial Study Group for purposes of performing Interconnection Studies for Large Generating Facilities whose Interconnection Requests are in the Serial Study Group.

-3. Requirements to Remain in the Transition Cluster

-3.1 ___General Requirements for Large Generating Facilities

-An Interconnection Request deemed to be included in the Transition Cluster in accordance with the decision of FERC in Docket No. ER08-960-000 will be deemed to have been withdrawn from the Transition Cluster unless the Interconnection Customer provides, within sixty (60) calendar days from the effective date of this Appendix 2 to the LGIP, all of the following: (i) a Transition Cluster Interconnection Study Deposit, (ii) a statement of the requested deliverability status, (iii) a preferred Point of Interconnection and voltage level and all other technical data required by the LGIP, if not already submitted to the CAISO, and (iv) demonstration of Site Exclusivity or a posting of a Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity must be, at a minimum, through the anticipated Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility.

-Section 3.8 of the LGIP shall not apply to a failure to satisfy the requirements of this Section 3.1 of this Appendix 2 to the LGIP.

-3.2 Special Requirements for Certain Small and Existing Large Generating Facilities

-An Interconnection Customer with an Interconnection Request in the Transition Cluster relating to (a) a Small Generating Facility seeking a Deliverability Assessment or (b) a Generating Facility, subject to the LGIP in accordance with CAISO Tariff Section 25.1.1, that has achieved Commercial Operation prior to the date of the Interconnection Request, and is seeking to increase the capacity of the Generating Facility by less than 20 MW, will be deemed to have withdrawn its Interconnection Request from the Transition Cluster unless it provides, within sixty (60) calendar days from the effective date of this Appendix 2 to the LGIP, all of the following: (i) a Transition Cluster Interconnection Study Deposit, (ii) a statement of the requested deliverability status, (iii) a preferred Point of Interconnection and voltage level and all other technical data required by the LGIP, if not already submitted to the CAISO, and (iv) demonstration of Site Exclusivity or a posting of a Site Exclusivity Deposit of \$250,000. The demonstration of Site Exclusivity, at a minimum, must be through the Commercial Operation Date of the new Large Generating Facility or increase in capacity of the existing Generating Facility.

-Section 3.8 of the LGIP shall not apply to a failure to satisfy the requirements of this Section 3.2 of this Appendix 2 to the LGIP.

-3.3 Communication of Transition Cluster Interconnection Study Deposit Amount

-The CAISO shall provide each Interconnection Customer with the amount of its Transition Cluster Interconnection Study Deposit within five (5) Business Days after the effective date of this Appendix 2 to the LGIP.

-3.4 ___Use of the Transition Cluster Interconnection Study Deposit

-The CAISO shall deposit all Transition Cluster Interconnection Study Deposits in an interest bearing account at a bank or financial institution designated by the CAISO. The Transition

Cluster Interconnection Study Deposit shall be applied to pay for prudent costs incurred by the CAISO, the Participating TOs, or third parties at the direction of the CAISO or Participating TOs, as applicable, to perform and administer the Interconnection Studies. The Transition Cluster Interconnection Study Deposit is not refundable.

-Upon execution of <u>a GIAan LGIA</u> by an Interconnection Customer, the CAISO and the applicable Participating TO(s), or the approval by FERC of an unexecuted GIA, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Transition Cluster Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceed the costs the CAISO, Participating TOs, or third parties have incurred on the Interconnection Customer's behalf.

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

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

-3.5 Obligation for Study Costs

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

4. ____Phase I Interconnection Study

4.1 Grouping Interconnection Requests and Base Cases

-Interconnection Requests in the Transition Cluster shall be grouped in accordance with LGIP Section 6.1. Rather than Generation submitted during a Queue Cluster Window, the Interconnection Base Case Data for the Transition Cluster shall reflect the Generation from those Interconnection Requests that satisfy the requirements of Sections 3.1 and 3.2 of this Appendix 2 to the LGIP.

4.2 Schedule

-The Phase I Interconnection Study, as described in LGIP Section 6, including the grouping and Interconnection Base Case Data development, for the Transition Cluster shall commence no later than December 1, 2008 or sixty (60) calendar days after the effective date of this Appendix 2 to

the LGIP, whichever is later. Results of the Phase I Interconnection Study shall be provided to the Interconnection Customer within two hundred forty (240) calendar days after commencement under this Section.

4.3 ___Results Meeting

-Within sixty (60) calendar days after providing the Phase I Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s), the CAISO and the Interconnection Customer shall meet to discuss the results of the Phase I Interconnection Study, including assigned cost responsibility.

-4.3.1 Modifications

-Proposed modifications to the Interconnection Request shall be evaluated as set forth in LGIP Section 6.7.2, except that for projects in the Transition Cluster (i) the modifications permitted under this Section shall also include: (d) an increase in the MW value above the Generating Facility Capacity set forth in the Interconnection Request, not to exceed thirty percent (30%) of the original amount (i.e. not to exceed 130% of the Generation Facility Capacity set forth in the original Interconnection Request); and (e) a change in the requested deliverability status set forth in the Interconnection Request from Energy Only to full capacity, and (ii) any modifications requested for projects in the Transition Cluster must be made within five (5) business days of the effective date of this tariff sheet.

-To the extent that modifications made by one or more Interconnection Customers for either of the reasons specified in this Section 4.3.1 causes the need for additional upgrades within the applicable Transition Cluster study group beyond those identified in the Phase I Interconnection Study, the responsibility for financing such incremental upgrades shall be assigned solely to those Interconnection Customers making such modifications, pro rata in accordance with applicable provisions of the LIGP and this Appendix 2.

-4.4 ___Cost Allocation Methods for Reliability Network Upgrades in Phase I Interconnection Study

-The estimated costs for Reliability Network Upgrades identified in the Phase I Interconnection Study for the Transition Cluster shall be allocated as set forth in LGIP Section 6.3.1, except that the estimated costs of short circuit related Reliability Network Upgrades identified through the Phase I Interconnection Study shall be assigned to all Interconnection Requests in that 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.

-5. Phase II Interconnection Study

-5.1 ___Phase II Interconnection Study Procedures

-The Phase II Interconnection Study, as described in LGIP Section 7, for the Transition Cluster shall commence no later than one hundred twenty (120) calendar days after publication of the Phase I Interconnection Study report. Results of the Phase II Interconnection Study shall be provided to the Interconnection Customer within three hundred thirty (330) calendar days after commencement under this Section.

-5.2 ___Coordination of the Phase II Interconnection Study with the Transmission Planning Process

-As part of the Uniform Planning Assumptions and Study Plan developed under Section 24 of the CAISO Tariff during calendar year 2009, the CAISO shall include technical analyses intended to identify, at a minimum, conceptual transmission upgrades that may access proposed Large Generating Facilities included in the Transition Cluster that are located in Energy Resource Areas.

5.3 ____Financing of Reliability Network Upgrades Identified in Phase II Interconnection Study

-The responsibility for financing final Reliability Network Upgrades identified in the Phase II Interconnection Study for the Transition Cluster shall be determined as set forth in LGIP Section 7.3, except that the responsibility for financing final short circuit related Reliability Network Upgrades identified in the Phase II Interconnection Study shall be assigned to all Interconnection Requests in that 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 and Section 4.4 of this Appendix 2.

Interconnection Financial Security

-The provisions of LGIP Section 9 shall apply to the Transition Cluster, except that (i) the initial posting of Interconnection Financial Security under LGIP Section 9.2 in Appendix Y shall be required on or before the later of ten (10) business days after the effective date of this tariff sheet or one hundred twenty (120) calendar days after publication of the Phase I Interconnection Study report, but in no event earlier than November 30, 2009 or later than December 1845, 2009; and (ii) any Interconnection Customer who has been permitted a modification for either of the reasons specified in Section 4.3.1 of this Appendix 2 shall make its first posting of Interconnection Financial Security for Network Upgrades pursuant to LGIP Section 9.2 in an amount equal to the lesser of \$20,000 per megawatt of electrical output of the Large Generating Facility, including any modifications thereto, or \$7,500,000, but in no event less than \$500,000, and shall make its second and third postings of Interconnection Financial Security for Network Upgrades pursuant to LGIP Section 9.3 based on the total cost responsibility assigned to the Interconnection Customer for Network Upgrades in the Phase II Interconnection Study.

Appendix 3

-LARGE-GENERATOR INTERCONNECTION STUDY PROCESS AGREEMENT FOR QUEUE CLUSTERS

	FOR QUEUE CLUSTERS
("Interconnection nonprofit public	AGREEMENT is made and entered into this day of , 20 by and between , a organized and existing under the laws of the State of , 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	REAS, 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
	REAS, the Interconnection Customer desires to interconnect the Large-Generating Facility Controlled Grid pursuant to the Queue Cluster process; and
performed Inter Facility to the C procurement ar	REAS, the Interconnection Customer has requested the CAISO to conduct or cause to be connection 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	THEREFORE, 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 Y ("GIPLGIP") 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 GIPLGIP in accordance with the CAISO Tariff.
-3.0	The scope of the Interconnection Studies shall be subject to the assumptions set forth in Appendices A and B to this Agreement.
4.0	The Interconnection Studies will be based upon the technical information provided by the Interconnection Customer in the Interconnection Request, as may be modified as the result of the Scoping Meeting, subject to any modifications in accordance with Section 6.97.2 of the GIPLGIP and modifications to the proposed Commercial Operation Date of the Large-Generating Facility permitted by the GIPLGIP. 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 GIPLGIP.
- -5.0 The Interconnection Study report for each Interconnection Study shall provide the information specified in the <u>GIPLGIP</u>.
- -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 GIPLGIP.
 - -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 SectionSectionS 3.5.1 and 7.8 of the GIPLGIP.
 - -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 GIPLGIP.
- -7.0 Pursuant to Section 3.7 of the GIPLGIP, the CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems. The CAISO may provide a copy of the Phase I Interconnection Study results to an Affected System Operator and the Western Electricity Coordinating Council. Requests for review and input from Affected System Operators or the Western Electricity Coordinating Council may arrive at any time prior to interconnection.
- -8.0 Substantial portions of technical data and assumptions used to perform the Phase I Interconnection Study, such as system conditions, existing and planned generation, and unit modeling, may change after the CAISO provides the Interconnection Study results to the Interconnection Customer. Interconnection Study results will reflect available data at the time the CAISO provides the Phase I Interconnection Study report to the Interconnection Customer. The CAISO shall not be responsible for any additional costs, including, without limitation, costs of new or additional facilities, system upgrades, or schedule changes, that may be incurred by the Interconnection Customer as a result of changes in such data and assumptions.

-9.0 **[NOT USED]**

- -10.0 The CAISO shall maintain records and accounts of all costs incurred in performing the Interconnection Study in sufficient detail to allow verification of all costs incurred, including associated overheads. The Interconnection Customer shall have the right, upon reasonable notice, within a reasonable time at the CAISO's offices and at its own expense, to audit the CAISO's records as necessary and as appropriate in order to verify costs incurred by the CAISO. Any audit requested by the Interconnection Customer shall be completed, and written notice of any audit dispute provided to the CAISO representative, within one hundred eighty (180) calendar days following receipt by the Interconnection Customer of the CAISO's notification of the final costs of the Interconnection Study.
- -11.0 In accordance with Section 3.8 of the GIPLGIP, 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 GIPLGIP.

- -12.0 Pursuant to Section <u>6.14</u> of the <u>GIPLGIP</u>, 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 <u>GIPLGIP</u>, 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 <u>GIPLGIP</u>.
- 13.0 Miscellaneous.
- -13.1 Dispute Resolution. Any dispute, or assertion of a claim, arising out of or in connection with this Agreement, shall be resolved in accordance with Section 13.5 of the GIPLGIP.
- -13.2 Confidentiality. Confidential Information shall be treated in accordance with Section 13.1 of the GIPLGIP.
- 13.3 Binding Effect. This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- -13.4 Conflicts. In the event of a conflict between the body of this Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.
- 13.5 Rules of Interpretation. This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article or Section of this Agreement or such Appendix to this Agreement, or such Section of the GIPLGIP or such Appendix to the GIPLGIP, 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.

-Waiver. The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

-Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO or CAISO. Any waiver of this Agreement shall, if requested, be provided in writing.

Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.

- 13.9 -Headings. The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.
- 13.10 -Multiple Counterparts. This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 13.11 -Amendment. The Parties may by mutual agreement amend this Agreement by a written instrument duly executed by both of the Parties.
- 13.12 -Modification by the Parties. The Parties may by mutual agreement amend the Appendices to this Agreement by a written instrument duly executed by both of the Parties. Such amendment shall become effective and a part of this Agreement upon satisfaction of all applicable laws and regulations.
- -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.
- -No Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.

13.15 -Assignment. This Agreement may be assigned by a Party only with the written consent of the other Party; provided that a Party may assign this Agreement without the consent of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; and provided further that the Interconnection Customer shall have the right to assign this Agreement, without the consent of the other Party, for collateral security purposes to aid in providing financing for the 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] By: _____ Printed Name: _____ Title: _____ Date:

California Independent System Operator Corporation

Appendix A

Assumptions In Phase I Interconnection Study

Large-Generator Interconnection

-Study Process Agreement for Queue Clusters

-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 6.97.2 of the GIPLGIP, and the following assumptions:

- -Designation of Point of Interconnection and configuration to be studied.
- -Deliverability status requested (full capacity or Energy only)

Appendix B

Data Form, Pre-Phase II Interconnection Study

<u>Large</u>-Generator Interconnection

-Study Process Agreement <u>for Queue Clusters</u>

-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 GIPLGIP.
-Provide location plan and one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.
-One set of metering is required for each generation connection to the new bus or existing CAISO Controlled Grid station. Number of generation connections:
-On the one line indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)
-On the one line indicate the location of auxiliary power. (Minimum load on CT/PT)
-Will an alternate source of auxiliary power be available during CT/PT maintenance? Yes No
-Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? Yes No -(Please indicate on one line).
-What type of control system or PLC will be located at the Interconnection Customer's Large-Generating Facility?
-What protocol does the control system or PLC use?
-Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.
-Physical dimensions of the proposed interconnection station:

-Bus length from generation to interconnection station:
-Line length from interconnection station to the Participating TO's transmission line.
-Tower number observed in the field. (Painted on tower leg)*
-Number of third party easements required for transmission lines*:
-* To be completed in coordination with the Participating TO or CAISO.
-Is the Large-Generating Facility in the Participating TO's service area?
-Yes No
-Local service provider for auxiliary and other power:
-Please provide proposed schedule dates:
-Environmental survey start:
-Environmental impact report submittal:
-Procurement of project equipment:
-Begin Construction Date:
-Generator step-up transformer Date:receives back feed power
-Generation Testing Date:
-Commercial Operation Date:
-Level of Deliverability: Choose one of the following:
Energy Only
Full Capacity

Appendix 4

Agreement for Allocating LGIP and Study Responsibilities

AGREEMENT FOR THE ALLOCATION OF RESPONSIBILITIES WITH REGARD TO

LARGE GENERATOR INTERCONNECTION PROCEDURES AND INTERCONNECTION STUDY

-AGREEMENTS

-This Agreement for the Allocation of Responsibilities With Regard to Large Generator
Interconnection Procedures and Interconnection Study Agreements ("Agreement"), dated
, is entered into between the California Independent System Operator
Corporation ("CAISO") and [NAME OF PTO] ("PTO"). The
CAISO and PTO are jointly referred to as the "Parties" and individually, as a "Party."
-WHEREAS, this Agreement will ensure an independent assessment of new-Large Generatin
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 consiste

-WHEREAS, this Agreement will ensure an independent assessment of new-Large Generating Facility impacts on the CAISO Controlled Grid and take advantage of the respective expertise of the Parties to facilitate efficient and cost effective Interconnection Study procedures in a manner consistent with the Federal Energy Regulatory Commission's ("FERC") July 1, 2005 Order (112 FERC ¶ 61,009), FERC's August 26, 2005 Order (112 FERC ¶ 61,231), and prior FERC Orders recognizing that Order No. 2003 did not allocate responsibilities between transmission owners and transmission providers for the provision of Interconnection Service and suggesting those parties enter into an agreement to allocate those responsibilities. Southwest Power Pool, Inc., 106 FERC ¶ 61,254 (2004).

-NOW THEREFORE, in view of the respective responsibilities assigned to the Parties and the foregoing FERC orders, and the provisions of the CAISO's Large-Generator Interconnection Procedures set forth in CAISO Tariff Appendix Y ("GIPLGIP"), the CAISO and PTO agree to the following allocation of responsibilities for a centralized Interconnection Study process under the direction and oversight of the CAISO:

-1. DEFINITIONS

-Unless otherwise defined herein, all capitalized terms shall have the meaning set forth in the CAISO Tariff

-2. TERM OF AGREEMENT

-This Agreement shall become effective upon the date specified in the first paragraph above and shall remain in effect until (1) terminated by all Parties in writing, or (2) with respect to the PTO, upon the termination of that entity's status as a PTO pursuant to the Transmission Control Agreement, as amended from time to time.

-3. PROVISIONS FOR ALLOCATION OF RESPONSIBILITIES BETWEEN CAISO AND PTO

-3.1 Interconnection Service: The Parties acknowledge that, as the transmission provider, the CAISO is responsible for reliably operating the transmission grid. The Parties also recognize that while the CAISO is a transmission provider under the CAISO Tariff, the CAISO does not own any transmission facilities, and the PTO owns, constructs, and maintains the facilities to which Large-Generating Facilities are to be interconnected, and that the PTO may construct or modify facilities to allow the interconnection. While the Parties recognize that the CAISO will be responsible for conducting or causing to be performed Interconnection Studies and similar studies, the PTO will participate in these studies and conduct certain portions of studies, under the direction and oversight of, and approval by, the CAISO, as provided in this Agreement. The CAISO shall not enter into any Interconnection Study agreement with an Interconnection Customer that is contrary to these rights.

-3.2 [INTENTIONALLY LEFT BLANK]

- -3.3 Transmission Owners' Right to Participation in Studies, Committees and Meetings:
 - 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 GIPLGIP. As appropriate, the PTO may participate in all other material or substantive communications in connection with an Interconnection Request.
- -3.4 Interconnection Study Responsibility Allocation: In complying with its responsibility for conducting or causing to be performed Interconnection Studies, the CAISO will assign responsibility for performance of portions of the Interconnection Studies to the PTO, under the direction and oversight of, and approval by, the CAISO, as set forth in Attachment A, except as specifically qualified as follows:
 - For any tasks specifically assigned to the PTO pursuant to Attachment A or otherwise mutually agreed upon by the CAISO and the PTO, the CAISO reserves the right, on a case-by-case basis, to perform or reassign to a mutually agreed upon and pre-qualified contractor such task only where: (a) the quality and accuracy of prior PTO Interconnection Study work product resulting from assigned tasks has been deemed deficient by the CAISO, the CAISO has notified the PTO pursuant to the notice provision of Section 4.16 of this Agreement in writing of the deficiency, and the deficiency has not been cured pursuant to Section 3.4.2 of this Agreement; (b) the timeliness of PTO Interconnection Study work product has been deemed deficient, and either (i) the CAISO has not been notified of the reasons and actions taken to address the timeliness of the work, or (ii) if notified, the stated reasons and actions taken are insufficient or unjustifiable and the PTO has not cured the deficiency pursuant to Section 3.4.2 of this Agreement; (c) the PTO has failed, in a mutually agreed upon timeframe, to provide the CAISO with information or data related to an Interconnection Request despite a written request by the CAISO, pursuant to Section 3.5 hereof, to do so, and such data is the responsibility of the PTO to provide to the CAISO, subject to Section 4.3 of this Agreement; (d) the PTO advises the CAISO in writing that it does not have the resources to adequately or timely perform the task according to the applicable timelines set forth in Attachment A; or (e) the estimated cost of the PTO performing the task has been determined in writing by the CAISO to significantly exceed the cost of the CAISO or mutually agreed upon contractor performing the task, inclusive of the costs

that will be incurred by the PTO in exercising its review rights of the results of any such tasks performed by such third party(ies). If the CAISO deviates from the assignments set forth in Attachment A based on the foregoing factors, the CAISO will provide the PTO with a written explanation for the deviation and any associated reassignments of work. The PTO may contest the deviation pursuant to the Dispute Resolution procedures set forth in Section 4.1 of this Agreement.

-Task(s) may only be reassigned in accordance with this Section 3.4.1 where the PTO has been deemed to be deficient in relation to that (those) particular task(s).

-3.4.2 Cure for reassigned Interconnection Study work

- -The CAISO shall not reassign task(s) without the opportunity to cure, as specified in Section 3.4.1 of this Agreement. The following actions will serve to cure the deficiencies and result in restoring the assignment(s) as provided in Attachment A:
 - -(a) The CAISO and PTO shall negotiate in good faith and agree to a corrective action plan proposed by the PTO, including a reasonably adequate cure period, and the corrective action plan is satisfactorily implemented.
 - -(b) The CAISO determines the deficiency is cured without an action plan.
- -3.4.3 Assessment of prior PTO Interconnection Study work shall only be based on work conducted under the process that becomes effective concurrent with the effective date of this Agreement. Further, assessment of prior PTO Interconnection Study work shall be based on work conducted no earlier than the eighteen (18) month period prior to the date of the CAISO notice of deviation from assignments set forth in Attachment A to this Agreement.
- -3.5 Information Exchange: The PTO shall provide the CAISO, subject to confidentiality requirements in Section 4.3 of this Agreement, with any documentation or data requested by the CAISO reasonably necessary to permit the CAISO to perform, review, validate and approve any Interconnection Study, or portion thereof, performed by the PTO. The CAISO shall provide the PTO with any documentation or data requested by the PTO, subject to confidentiality requirements in Section 4.3 of this Agreement, reasonably necessary to perform, review, and validate any Interconnection Study, or portion thereof.
- -3.6 Consistency with Provisions for Centralized Interconnection Study Process: The CAISO and PTO have determined that the processes and allocation of responsibilities in Section 3.4 of this Agreement ensure that impacts to the CAISO Controlled Grid are independently assessed and that the assignment of responsibilities minimizes handoffs, takes advantage of non-transferable skills, and promotes the efficiency and cost-effectiveness of the centralized Interconnection Study processes, consistent with GIPLGIP Section 3.2.
- -3.7 Re-Studies: If any re-studies are required, the CAISO will confer with the PTO as to the need for a re-study. The CAISO will make the final determination regarding the need for a re-study, subject to dispute resolution procedures.
- -3.8 Use of Contractors: Nothing in this Agreement shall prevent either the CAISO or the PTO from using qualified, mutually agreed upon third party contractors to meet that Party's rights or obligations under this Agreement or the GIPLGIP. 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 GIPLGIP, this Agreement, and any FERC approved Interconnection Study procedures that may be adopted by the CAISO to implement the GIPLGIP 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 GIPLGIP, 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 GIPLGIP.
- **-4.4** Binding Effect: This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- **4.5** Conflicts: In the event of a conflict between the body of this Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.
- **-4.6** Rules of Interpretation: This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section, Attachment, or Appendix means such Article or Section of this Agreement or such Attachment or Appendix to this Agreement, or such Section of the GIPLGIP or such Appendix to the GIPLGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article or Section; (7)

"including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".

- -4.7 Entire Agreement: This Agreement, including all Attachments hereto, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, among the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants, which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.
- -4.8 No Third Party Beneficiaries: This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.
- 4.9 Waiver: The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party. Any waiver at any time by a Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Any waiver of this Agreement shall, if requested, be provided in writing. Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- **-4.10** Headings: The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.
- **4.11** Multiple Counterparts: This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 4.12 Modification by the Parties: The Parties may amend this Agreement and any Appendices to this Agreement only (1) by mutual agreement of the Parties by a written instrument duly executed by the Parties, subject to FERC approval or (2) upon the issuance of a FERC order, pursuant to Section 206 of the Federal Power Act. It is the Parties' intent that FERC's right to change any provision of this Agreement shall be limited to the maximum extent permissible by law and that any such change, if permissible, shall be in accordance with the Mobile-Sierra public interest standard applicable to fixed rate agreements. United Gas Pipe Line Co. v. Mobile Gas Service Corp., 350 U.S. 332 (1956). Such amendment shall become effective and a part of this Agreement upon satisfaction of all applicable laws and regulations. Notwithstanding the foregoing, Attachment B (Notices) may be modified as set forth in Section 4.15 of this Agreement, and the CAISO and the PTO may from time to time mutually agree to deviate from Attachment A in accordance with the provisions of this Agreement, however, such deviation shall be subject to Section 4.9 of this Agreement and not considered a course of dealing.

- -4.13 No Partnership: This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.
- -4.14 Assignment: This Agreement may be assigned by a Party only with the written consent of the other Parties; provided that a Party may assign this Agreement without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.
- -4.15 Notices: Any notice, demand, or request provided in this Agreement, or served, given, or made in connection with it, will be in writing and deemed properly served, given, or made if delivered in person, transmitted by facsimile, or sent by United States mail, postage prepaid, to the persons specified in Attachment B hereto unless otherwise provided in this Agreement. Any Party may at any time, by notice to all other Parties, change the designation or address of the person specified in Attachment B as the person who receives notices pursuant to this Agreement.

-IN WITNESS WHEREOF, the Parties have executed this Agreement in multiple originals, each of which shall constitute and be an original effective agreement among the Parties.

-California Independent System Operator Corporation

-By:

•
Printed Name:
-Title:
-Date:
-[NAME OF PTO]
-By:
-Printed Name:
-Title:
-Date:

-ATTACHMENT A

-INTERCONNECTION STUDY RESPONSIBILITY ALLOCATION

-Description of Large-Generator Interconnection Process: Roles and Responsibilities of CAISO and PTOs.

-Purpose: This Attachment A to the "AGREEMENT FOR THE ALLOCATION OF RESPONSIBILITIES WITH REGARD TO LARGE GENERATOR INTERCONNECTION PROCEDURES AND INTERCONNECTION STUDY AGREEMENTS" serves as further clarification of the roles and responsibilities of the parties to this Agreement. The CAISO will assign responsibility for performance of portions of the Interconnection Studies to the relevant PTOs, under the direction and oversight of, and approval by, the CAISO, as set forth in this Attachment A. This document serves as a general overview of only the roles and responsibilities as between the CAISO and PTOs. This Agreement does not include the process steps, involvement or obligations of the Interconnection Customer (IC). This Agreement is not inclusive of all procedures necessary to comply with all provisions of the GIA, GIPLGIA, LGIP and Large Generator Interconnection Study Process Agreement for Queue Clusters.

-Interconnection Request (IR) Process

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

-Phase I Interconnection Study Timeline

Line	Initial (Phase I) Cluster Study	Typical Calendar Days	Timeline (Days)
1	CAISO and PTOs develop initial Generating Facility groups for initial Dispatch assumptions and cost allocation purposes (except for thermal overload and short circuit mitigation).	<u>1</u> 7	1 -7
2	PTOs develop draft Base Cases, each representing all Generating Facilities in the queue cluster, and deliver to CAISO.	<u>15</u> 21	<u>2-16</u> 1-21
3	PTO develops preferred and alternative, if applicable, direct interconnection plans, including the need for an Interconnection Grid Substation (IGS).	<u>15</u> 25	<u>2-16</u> 22-46
4	PTO develops draft contingency lists.	<u>15</u> 25	<u>2-16</u> 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.	<u>5</u> 24	<u>17-21</u> 4 7-67
6	CAISO provides Deliverability Assessment results identifying constrained facilities, using summer peak and off-peak Base Cases, and prepares results	<u>15</u> 21	<u>22-36</u> 68-88

	summary and may propose mitigation plans for PTO review.				
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.	<u>15</u> 21	<u>22-36</u> 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	<u>1521</u>	<u>37-51</u> 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.				
10	CAISO develops shift factors for cost allocation purposes of all Network Upgrades associated with mitigating thermal overloads.	<u>5</u> 7	57-61124- 130		
Short C	Circuit Duty (concurrent with the LF/PT/S)				
11	CAISO coordinates with other potentially affected facility owners ¹ .	n/a	n/a		
12	CAISO directs PTO to develop Base Case and run short circuit analysis.	<u>1021</u>	<u>57</u> 46-66		
13	PTO performs facilities review. (Note: possibly for feedback into the power flow studies and PTO 1028 mitigation plans.)		67- <u>76</u> 94		
14	PTO prepares draft study results and submits to the CAISO for review and direction.	<u>3</u> 28	<u>77-79</u> 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.	<u>78</u> 20	22-99124- 143		
Final R	eport		•		
16	At the CAISO's direction, PTO(s) prepares draft report for impacts in its service territory.	<u>83</u> 7	<u>22-104</u> 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.	<u>10</u> 9	105-114 151- 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. PTO submits final draft report to the CAISO. The	<u>10</u> 14	115-124160- 173		
19	CAISO will finalize the report and tender the CAISO approved report to the ICs.				
Final St	tudy Report	1	ı		
20	CAISO provides final approved report to ICs, PTO, and any applicable Affected Systems.	<u>10</u> 7	125-134 <mark>174-</mark> 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.	<u>10</u> 30	1- <u>10</u> 30	
22	CAISO reviews and approves Base Cases.	5	11-15	
23	CAISO and PTOs update studies performed in Phase I lines 6-14 using Base Cases from line 22. Additional alternatives may be considered tothat address future generation development potential, meet load serving capability, and economic benefit objectives, and phased development and option value of transmission projects to address uncertainty.	<u>75</u> 120	16-9031- 150	
23.1	Large Network Upgrades will be further evaluated within the Phase 2 transmission study process as set forth in Appendix 24 of the CAISO Tariff. The large Network Upgrades either (a) consist of new transmission lines requiring new rights of way, are 200 kV or above, and have capital costs of \$50 million or greater, or (b) are 500 kV substation facilities that have capital costs of \$50 million or greater. Projects from line 23 requiring CPUC or CAISO Governing Board approval may need to go through the Transmission Planning Process stakeholder process. After completing the stakeholder review process, these projects would proceed through the activities described in lines 24 through 32. Projects not requiring CPUC or CAISO Governing Board approval, or that have already gone through a stakeholder process, would proceed immediately to the activities described in lines 24 through 32. (See Appendix C of the CAISO's proposal for the generator interconnection process reform.)			
24	PTOs develop draft off-peak and summer peak operating year Base Cases as appropriate where each case includes all Generating Facilities in Phase II Interconnection Study having the same operating date and deliver to CAISO. CAISO reviews and approves cases from line 24.	30	61-90151- 180*	
	At the CAISO's direction, the PTOs perform			
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.	<u>30</u> 45	91-120181 225*	
27	At the CAISO's direction, the PTOs perform additional operational studies to identify the optimal approach for building out the overall plan of service on a segmented (i.e. building block) basis acknowledging that portions of the overall plan of service may be	<u>10</u> 30	121- 130226- 255*	

	staged in segments over time.				
Final Pl	Final Plan of Service Report Including Facility Costs and Schedules				
28	At the CAISO's direction, PTO(s) prepares draft plan of service report. At the CAISO's direction, PTO(s) to prepare detailed cost estimates and schedules for the direct assignment facilities and Network Upgrades identified in the overall plan of service and including individual segments.	<u>75</u> 7	91-165256- 262*		
29	CAISO reviews draft plan of service report and submits comments, recommendations and direction to the PTO.	<u>10</u> 9	<u>166-</u> <u>175263- 271*</u>		
30	PTO incorporates CAISO directions, conclusions and recommendations. If CAISO conclusions and recommendations conflict with PTO conclusions, then CAISO and PTO must coordinate to resolve conflicts. Any remaining conflicts must be noted in the final report.	<u>21</u> 14	<u>176-</u> <u>196272- 285*</u>		
31	PTO submits final draft report to the CAISO. The CAISO will finalize the report.				
Facility Costs and Schedules					
32	At the CAISO's direction, PTO(s) prepares detailed cost estimates and schedules for the direct assignment facilities and Network Upgrades identified in the overall plan of service and including individual segments.	75	256-330*		

^{*} For projects going through the Transmission Planning Process as described in Line 23.1, the activities in lines 24 through 32 may be delayed until the Network Upgrade plan is approved through the Transmission Planning Process. However, the subsequent cluster study would proceed on schedule based on the plan of service from line 23.

-ATTACHMENT B

-CONTACTS FOR NOTICES

-[Section 4.15]

-California ISO

- -Manager, Transmission Engineering -Blue Ravine Road
- -Folsom, CA 95630
- -Phone: 916.351.2104
- -Fax: 916.351.2264

-[NAME OF PTO]

-[Address of PTO]

Appendix 5 Schedule for Release and Review of Per Unit Costs

SCHEDULE FOR RELEASE AND REVIEW OF PER UNIT COSTS

SCHEDULE FOR RELEASE AND REVIEW OF PER UNIT COSTS				
Line	Schedule for the Release and Review of Per Unit Costs for 2009	Anticipated Calendar Date(s)		
1. 3.	Participating TOs (PTOs) to develop their draft per unit costs.	11/3/2008 1/30/2009		
2. 4.	PTOs to provide their draft per unit costs to the CAISO on or before 1/30/09 for CAISO review and posting to the CAISO Website.	1/30/2009		
3. <u>5.</u>	CAISO to review and post the PTO draft per unit costs to the CAISO Website, for Stakeholder review.	2/2/09 2/6/09		
4. <u>6.</u>	Provides two weeks for stakeholder review of the posted draft per unit costs.	2/6/09 – 2/20/09		
5. 7.	GAISO to schedule and conduct a one-day stakeholder meeting to discuss the draft per unit costs with the stakeholders ² .	2/23/09 - 2/27/09		
6. 8.	Provides two weeks following the scheduled stakeholder meeting for stakeholders to provide comments to the CAISO.	2/27/09 3/13/09		
7. 9.	finalize their per unit costs.	3/16/09 – 3/27/09		
8. 10	PTOs to provide their final per unit costs to the CAISO for posting to the CAISO Website.	3/27/09		
9. 11	COSTS TO THE CAISO WEDSITE.	3/27/09 4/1/09		
10. 1	Final per unit costs are posted and available for use to estimate the costs of Network Upgrades and Interconnection Facilities.	4/1/09		
	Annual Review, Update, and Posting of Per Unit Costs after 2009			
11. 1	PTOs to review and update their per unit costs.	October - mid-January		
12. 1	PTOs to provide their updated per unit costs to the CAISO for CAISO review and posting to the CAISO Website.	Mid-January		
13. 1	CAISO to review and post the PTO per unit costs to the CAISO Website for stakeholder review.	Third week of January		
<u> 14.1</u>	Provide two weeks for stakeholders to review the posted per unit costs.	Last week of January and first week of February		
15. 1	CAISO to schedule and conduct a one-day stakeholder meeting in February to discuss the posted per unit costs with stakeholders.	Second week of February		
16. 1	Provide two weeks following the scheduled stakeholder meeting for stakeholders to provide comments to the CAISO.	Last two weeks of February		
17. 1	Provide two weeks for CAISO and PTOs to review and address stakeholder comments.	First two weeks of March		
18. 2	Provide three weeks following the stakeholder meeting for PTOs to review, update as needed, and	First three weeks of March		

	finalize their per unit costs.	
19. 2	PTOs to provide their final per unit costs to the CAISO for posting to the CAISO Website.	End of third week of March
	CAISO to review and post the PTOs' final per unit costs to the CAISO Website.	Fourth week of March
21. 2	Final per unit costs are posted and available for use to estimate the costs of Network Upgrades and Interconnection Facilities.	Last week of March to first of April

Appendix 6

GENERATOR INTERCONNECTION STUDY PROCESS AGREEMENT FOR INDEPENDENT STUDY PROCESS

	THIS AGREEMENT	is made and entered into this	day of	, 20	by and between	<u>en</u>
	, a	organized and existir	ng under t	he laws of th	ne State of	
("Interco	onnection Customer")	and the California Independen	t System	Operator Co	orporation, a C	alifornia
nonprof	it public benefit corpo	oration existing under the laws of	of the State	e of Californ	ia, ("CAISO").	The
Intercor	nection Customer an	nd the CAISO each may be refe	rred to as	a "Party," o	r collectively as	s the
"Parties						

RECITALS

WHEREAS, the Interconnection Customer is proposing to develop a Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated ; and

WHEREAS, the Interconnection Customer desires to interconnect the Generating Facility with the CAISO Controlled Grid pursuant to the Independent Study Process; and

WHEREAS, the Interconnection Customer has requested the CAISO to conduct or cause to be performed Interconnection Studies to assess the system impact of interconnecting the Generating Facility to the CAISO Controlled Grid and to specify and estimate the cost of the equipment, engineering, procurement and construction work needed on the Participating TO's electric system in accordance with Good Utility Practice to physically and electrically connect the Generating Facility to the CAISO Controlled Grid;

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the CAISO's FERC-approved Generation Interconnection Procedures in CAISO Tariff Appendix Y ("GIP") 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 consistent with the GIP in accordance with the CAISO Tariff.
- 3.0 The scope of the applicable Interconnection Studies shall be subject to the assumptions set forth in Appendices A and B to this Agreement.
- 4.0 The Interconnection Studies will be based upon the technical information provided by the Interconnection Customer in the Interconnection Request, as may be modified as the result of the Scoping Meeting, subject to any modifications in accordance with Section 6.9.2 of the GIP and modifications to the proposed Commercial Operation Date of the Generating Facility permitted by the GIP. 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 GIP.
- 5.0 The Interconnection Study report for each Interconnection Study shall provide the information specified in the GIP.

6.0 The Interconnection Customer shall provide an Interconnection Study Deposit 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 GIP.

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 Section 3.5.1 of the GIP.

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 GIP.

- 7.0 Pursuant to Section 3.7 of the GIP, 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 System Impact 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 System Impact 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 System Impact Study report to the Interconnection Customer. The CAISO shall not be responsible for any additional costs, including, without limitation, costs of new or additional facilities, system upgrades, or schedule changes, that may be incurred by the Interconnection Customer as a result of changes in such data and assumptions.
- 9.0 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.
- 10.0 In accordance with Section 3.8 of the GIP, 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 Sections 3.5.1 and 13.1 of the GIP.
- 11.0 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 GIP, 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 GIP.
- 12.0 Miscellaneous.

- 12.1 Dispute Resolution. Any dispute, or assertion of a claim, arising out of or in connection with this Agreement, shall be resolved in accordance with Section 13.5 of the GIP.
- 12.2 Confidentiality. Confidential Information shall be treated in accordance with Section 13.1 of the GIP.
- 12.3 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.
- 12.4 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.
- 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 GIP or such Appendix to the GIP, 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".
- 12.6 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.
- 12.7 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.
- 12.8 Waiver. The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this

Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO or CAISO. Any waiver of this Agreement shall, if requested, be provided in writing.

Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.

- 12.9 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.
- 12.10 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.
- 12.11 Amendment. The Parties may by mutual agreement amend this Agreement by a written instrument duly executed by both of the Parties.
- 12.12 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.
- 12.13 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.
- 12.14 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.
- 12.15 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 Generating Facility, provided that the Interconnection Customer will require any secured party, trustee or mortgagee to notify the other Party of any such assignment. Any financing

arrangement entered into by the Interconnection Customer pursuant to this Section will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the other Party of the date and particulars of any such exercise of assignment right(s). Any attempted assignment that violates this Section is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

IN WITNESS THEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

California Independent System Operator Corporation	
By:	
Printed Name:	
Date:	
[Insert name of the Interconnection Customer]	
_By:	
Printed Name:	•
Title:	

Appendix A

Generator Interconnection Study Process Agreement for Independent Study Process

ASSUMPTIONS USED IN CONDUCTING THE SYSTEM IMPACT STUDY

The System Impact 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 6.9.2 of the GIP, and the following assumptions:

<u>Designation of Point of Interconnection and configuration to be studied.</u>

Deliverability Status requested (Full Capacity or Energy-Only)

Appendix B Data Form, Pre-Facilities Study Generator Interconnection Study Process Agreement for Independent Study Process

DATA FORM TO BE PROVIDED BY THE INTERCONNECTION CUSTOMER PRIOR TO COMMENCEMENT OF THE FACILITIES STUDY

Generating Facility size (MW):
Provide two copies of this completed form and other required plans and diagrams in accordance with Section 4.5 of the GIP.
Provide location plan and one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.
One set of metering is required for each generation connection to the new bus or existing CAISO Controlled Grid station. Number of generation connections:
On the one line indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)
On the one line indicate the location of auxiliary power. (Minimum load on CT/PT)
Will an alternate source of auxiliary power be available during CT/PT maintenance? Yes No
Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? Yes No (Please indicate on one line).
What type of control system or PLC will be located at the Interconnection Customer's Generating Facility?
What protocol does the control system or PLC use?

Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.
Physical dimensions of the proposed interconnection station:
Bus length from generation to interconnection station:
Line length from interconnection station to the Participating TO's transmission line.

Tower number observed in the field. (Painted on tower leg)*
Number of third party easements required for transmission lines*:
* To be completed in coordination with the Participating TO or CAISO.
Is the Generating Facility in the Participating TO's service area?
Yes No
Local service provider for auxiliary and other power:
Please provide proposed schedule dates:
Environmental survey start:
Environmental impact report submittal:
Procurement of project equipment:
Begin Construction Date:
Generator step-up transformer Date:
receives back feed power
Generation Testing Date:
Commercial Operation Date:
Level of Deliverability Status: Choose one of the following:
Energy-Only
Full Capacity

Appendix 7

Application, Procedures & Terms for 10kW Interverter Process

Application, Procedures, and Terms and Conditions for Interconnecting

a Certified Inverter-Based Small Generating Facility No

Larger than 10 kW ("10 kW Inverter Process")

- 1.0 The Interconnection Customer ("Customer") completes the Interconnection Request ("Application") and submits it to the Participating TO ("Company").
- 2.0 The Company acknowledges to the Customer receipt of the Application within three Business Days of receipt.
- 3.0 The Company evaluates the Application for completeness and notifies the Customer within ten

 Business Days of receipt that the Application is or is not complete and, if not, advises what
 material is missing.
- 4.0 The Company verifies that the Small Generating Facility can be interconnected safely and reliably using the screens contained in the Fast Track Process in the Generator Interconnection

 Procedures (GIP). The Company has 15 Business Days to complete this process. Unless the Company determines and demonstrates that the Small Generating Facility cannot be interconnected safely and reliably, the Company approves the Application and returns it to the Customer. Note to Customer: Please check with the Company before submitting the Application if disconnection equipment is required.
- 5.0 After installation, the Customer returns the Certificate of Completion to the Company. Prior to parallel operation, the Company may inspect the Small Generating Facility for compliance with standards which may include a witness test, and may schedule appropriate metering replacement, if necessary.
- 6.0 The Company notifies the Customer in writing that interconnection of the Small Generating
 Facility is authorized. If the witness test is not satisfactory, the Company has the right to
 disconnect the Small Generating Facility. The Customer has no right to operate in parallel until a
 witness test has been performed, or previously waived on the Application. The Company is
 obligated to complete this witness test within ten Business Days of the receipt of the Certificate of
 Completion. If the Company does not inspect within ten Business Days or by mutual agreement
 of the Parties, the witness test is deemed waived.
- 7.0 Contact Information The Customer must provide the contact information for the legal applicant (i.e., the Interconnection Customer). If another entity is responsible for interfacing with the Company, that contact information must be provided on the Application.
- 8.0 Ownership Information Enter the legal names of the owner(s) of the Small Generating Facility.

 Include the percentage ownership (if any) by any utility or public utility holding company, or by any entity owned by either.
- 9.0 UL1741 Listed This standard ("Inverters, Converters, and Controllers for Use in Independent Power Systems") addresses the electrical interconnection design of various forms of generating equipment. Many manufacturers submit their equipment to a Nationally Recognized Testing Laboratory (NRTL) that verifies compliance with UL1741. This "listing" is then marked on the equipment and supporting documentation.

Application for Interconnecting a Certified Inverter-Based Small Generating Facility No Larger than 10kW

This Application is considered complete when it provides all applicable and correct information required below. Additional information to evaluate the Application may be required.

A non-refundable processing fee of \$100 must accompany this Application.

Processing Fee

Estimated Installation Date:

Interconnection Customer					
Name:					
Contact Person:					
Address:	O1 1				
City:	State:	`	Zip)	
Telephone (Day):	(Eveni				
Fax:	E-Mail A	<u> </u>			
Contact (if different from Interco	onnection Customer)				
Name:	<u>, </u>				
Address:					
City:	State:			Zip:	
Telephone (Day):		Evening):			
Fax:	E-M	ail Address:			
Owner of the facility (include % Small Generating Facility Inforr Location (if different from above Electric Service Company:	<u>nation</u>	ectric utility)	:		
Account Number:					
Inverter Manufacturer:	(1.14.()	Model		(100) (-11-)	
Nameplate Rating:	(kW)	(kVA)		(AC Volts)	
	ee Phase(kW)		(kVA)		
System Design Capacity:		First Oall	(KVA)		
	eciprocating Engine	Fuel Cell			
Turbine Other	Ivalia Diagal Matura	1.000			
Energy Source: Solar Wind F		<u> </u>			
Fuel Oil Other			No		
Is the equipment UL1741 Lister			INU		
If Yes, attach manufacturer's cu	ut-sneet snowing UL1	141 listing			

The 10 kW Inverter Process is available only for inverter-based Small Generating Facilities no larger than 10 kW that meet the codes, standards, and certification requirements of Appendices 9 and 10 of the Generator Interconnection Procedures (GIP), or the Participating TO has reviewed the design or tested the proposed Small Generating Facility and is satisfied that it is safe to operate.

Estimated In-Service Date:

List components of the Small Generating Facility equipment package that are currently certified:

Equipment Type Certifying Entity
2.
3
<u>4.</u>
<u>5.</u>
<u>6</u>
Interconnection Customer Signature I hereby certify that, to the best of my knowledge, the information provided in this Application is true. I agree to abide by the Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW and return the Certificate of Completion when the Small Generating Facility has been installed.
Signed:
Title: Date:
Contingent Approval to Interconnect the Small Generating Facility
(For Company use only)
Interconnection of the Small Generating Facility is approved contingent upon the Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW and return of the Certificate of Completion.
Company Signature:
Title: Date:
Application ID number:
Company waives inspection/witness test? Yes No
Small Generating Facility Certificate of Completion
Is the Small Generating Facility owner-installed? Yes No
Interconnection Customer:
Contact Person:
Address:
Location of the Small Generating Facility (if different from above):

City:	State:	Zip Code:
Telephone (Day):	(Evening):	
Fax:	E-Mail Address:	
Electrician:		
Name:		
Address:		
City:	State:	Zip Code:
Telephone (Day):	(Evening):	
Fax:	E-Mail Address:	
License number:		
Date Approval to Install Facility gra	inted by the Company:	
Application ID number:		
Inspection:		
The Small Generating Facility has	been installed and inspected in comp	liance with the local
building/electrical code of		
Signed (Local electrical wiring insp	ector, or attach signed electrical inspe	ection):
Print Name:		
Date:		
As a condition of interconnection, y signed electrical permit to (insert C	vou are required to send/fax a copy of company information below):	this form along with a copy of the
Name:		
Company:		
Address:		
City	State	ZIP:

Fax:	
Approval to Energize the Small Generating Facility (For C	Company use only)
Energizing the Small Generating Facility is approved conf	tingent upon the Terms and Conditions for
Interconnecting an Inverter-Based Small Generating Faci	lity No Larger than 10kW
Company Signature:	
Title:	Date:

Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW

1.0 Construction of the Facility

The Interconnection Customer (the "Customer") may proceed to construct (including operational testing not to exceed two hours) the Small Generating Facility when the Participating TO (the "Company") approves the Interconnection Request (the "Application") and returns it to the Customer.

2.0 Interconnection and Operation

The Customer may operate Small Generating Facility and interconnect with the Company's electric system once all of the following have occurred:

- 2.1 Upon completing construction, the Customer will cause the Small Generating Facility to be inspected or otherwise certified by the appropriate local electrical wiring inspector with jurisdiction, and
- 2.2 The Customer returns the Certificate of Completion to the Company, and
- 2.3 The Company has either:
 - 2.3.1 Completed its inspection of the Small Generating Facility to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with applicable codes. All inspections must be conducted by the Company, at its own expense, within ten Business Days after receipt of the Certificate of Completion and shall take place at a time agreeable to the Parties. The Company shall provide a written statement that the Small Generating Facility has passed inspection or shall notify the Customer of what steps it must take to pass inspection as soon as practicable after the inspection takes place; or
 - 2.3.2 If the Company does not schedule an inspection of the Small Generating Facility within ten business days after receiving the Certificate of Completion, the witness test is deemed waived (unless the Parties agree otherwise); or
 - 2.3.3 The Company waives the right to inspect the Small Generating Facility.

- 2.4 The Company has the right to disconnect the Small Generating Facility in the event of improper installation or failure to return the Certificate of Completion.
- 2.5 Revenue quality metering equipment must be installed and tested in accordance with applicable ANSI standards.

3.0 Safe Operations and Maintenance

The Customer shall be fully responsible to operate, maintain, and repair the Small Generating Facility as required to ensure that it complies at all times with the interconnection standards to which it has been certified.

4.0 Access

The Company shall have access to the disconnect switch (if the disconnect switch is required) and metering equipment of the Small Generating Facility at all times. The Company shall provide reasonable notice to the Customer when possible prior to using its right of access.

5.0 Disconnection

The Company may temporarily disconnect the Small Generating Facility upon the following conditions:

- 5.1 For scheduled outages upon reasonable notice.
- 5.2 For unscheduled outages or emergency conditions.
- 5.3 If the Small Generating Facility does not operate in the manner consistent with these Terms and Conditions.
- 5.4 The Company shall inform the Customer in advance of any scheduled disconnection, or as is reasonable after an unscheduled disconnection.

6.0 Indemnification

The Parties shall at all times indemnify, defend, and save the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or inactions of its obligations under this agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

7.0 Insurance

The Parties each agree to maintain commercially reasonable amounts of insurance.

8.0 Limitation of Liability

Each party's liability to the other party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either party be liable to the other party for any indirect, incidental, special,

consequential, or punitive damages of any kind whatsoever, except as allowed under paragraph 6.0.

9.0 Termination

The agreement to operate in parallel may be terminated under the following conditions:

9.1 By the Customer

By providing written notice to the Company.

9.2 By the Company

If the Small Generating Facility fails to operate for any consecutive 12-month period or the Customer fails to remedy a violation of these Terms and Conditions.

9.3 Permanent Disconnection

In the event this Agreement is terminated, the Company shall have the right to disconnect its facilities or direct the Customer to disconnect its Small Generating Facility.

9.4 Survival Rights

This Agreement shall continue in effect after termination to the extent necessary to allow or require either Party to fulfill rights or obligations that arose under the Agreement.

10.0 Assignment/Transfer of Ownership of the Facility

This Agreement shall survive the transfer of ownership of the Small Generating Facility to a new owner when the new owner agrees in writing to comply with the terms of this Agreement and so notifies the Company.

Appendix 8

Transition of Existing SGIP Interconnection Requests to the GIP

Generator Interconnection Procedures (GIP) Relating to the SGIP Serial Study Group and SGIP Transition Cluster

Section 1. Objective, Applicability and Definitions

1.1 Objective and Applicability

The objective of this Appendix 8 to the Generator Interconnection Procedures (GIP) is to implement the requirements for interconnecting to the CAISO Controlled Grid those Generating Facilities assigned to the SGIP Serial Study Group or SGIP Transition Cluster.

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 8 to the GIP. Further, unless the context otherwise requires, any word or expression defined in GIP Section 1.2 shall have the same meaning where used in this Appendix 8 to the GIP. References to the GIP in this Appendix 8 are to Appendix Y of the CAISO Tariff.

1.2.2 Special Definitions for this GIP Appendix 8

In this Appendix 8 to the GIP, the following words and expressions shall have the meanings set opposite them:

"SGIP Serial Study Group" shall mean those Interconnection Customers with valid Interconnection Requests submitted pursuant to Appendix S of the CAISO Tariff prior to December 18, 2010 and who have executed System Impact Study or Facilities Study Agreements that provide for the completion of such studies by December 18, 2010.

"SGIP Transition Cluster" shall mean those Interconnection Customers with valid Interconnection Requests submitted pursuant to Appendix S of the CAISO Tariff prior to December 18, 2010 and which have not executed System Impact Study or Facilities Study Agreements that provide for the completion of such studies by December 18, 2010.

2. Transition of Projects in SGIP Serial Study Group

- An Interconnection Request deemed to be included in the SGIP Serial Study Group that wishes to be studied as an Energy-Only Deliverability Status Generating Facility shall not be required to conform to the provisions of Appendix Y of the CAISO Tariff. Rather, such Interconnection Requests will continue to be processed per the procedures set forth in Appendix S to the CAISO Tariff, unless they specifically indicate, in writing, within five (5) Business Days from the effective date of this Appendix 8 to the GIP, that they wish to be included in either the SGIP Transition Cluster, studied for Full Capacity Deliverability Status, or, if eligible, studied under the Independent Study Process set forth in Section 4 of Appendix Y.
- 2.2 An Interconnection Request deemed to be included in the SGIP Serial Study Group that wishes to be studied as a Full Capacity Deliverability Status Generating Facility will continue to be processed per the procedures set forth in Appendix S to the CAISO Tariff

for Energy-Only Deliverability Status, with a Full Capacity Delivery Status Deliverability Assessment to be performed as part of the next Interconnection Study Cycle following the completion of the serial portion of the Generating Facility's studies pursuant to Appendix S.

3. Transition of Generating Facilities in SGIP Transition Cluster

- An Interconnection Request deemed to be included in the SGIP Transition Cluster (including those Generating Facilities defined as part of the SGIP Serial Study Group who choose to be processed in the SGIP Transition Cluster) that wishes to be studied as an Energy-Only Deliverability Status Generating Facility shall be processed per the procedures set forth in Appendix Y to the CAISO Tariff and studied as part of the Phase II Interconnection Study for the CAISO's first and second Queue Clusters, which is scheduled to begin on January 1, 2011 and be completed on July 31, 2011.

 Alternatively, Interconnection Requests deemed to be included in the SGIP Transition Cluster may, by indicating in writing within five (5) Business Days from the effective date of this Appendix 8 to the GIP, elect to be studied for Full Capacity Deliverability Status, or, if eligible, as part of the Independent Study Process set forth in Section 4 of Appendix Y.
- An Interconnection Request deemed to be included in the SGIP Transition Cluster that wishes to be studied as a Full Capacity Deliverability Status Generating Facility shall be studied for Energy-Only Deliverability Status as part of the Phase II Interconnection Study for the CAISO's first and second Queue Clusters, with a Full Capacity Deliverability Status Deliverability Assessment to be performed as part of the CAISO's fourth Queue Cluster, which is scheduled to begin on June 1, 2011.
- An Interconnection Customer in the SGIP Transition Cluster must post, within thirty (30) calendar days of the effective date of this Appendix 8, all of the following: (i) an Interconnection Study Deposit equal to the amount set forth in Section 3.5.1 of Appendix Y, if it has not done so already; and (ii) a demonstration of Site Exclusivity, if it has not done so already. An Interconnection Customer that does not satisfy these posting requirements will be withdrawn from the SGIP Transition Cluster. An Interconnection Customer who withdraws from the SGIP Transition Cluster will be refunded the entire amount of its Interconnection Study Deposit upon withdrawal, less any amounts that the CAISO, Participating TO(s), and third parties have incurred in performing studies on the Interconnection Customer's behalf.
- At the conclusion of the Phase II Interconnection Study for the CAISO's first and second Queue Clusters, each Interconnection Customer remaining in the SGIP Transition Cluster shall receive a Phase II Interconnection Study report, which will indicate each Interconnection Customer's allocated share of costs for Interconnection Facilities and Reliability Network Upgrades. If the Interconnection Customer wishes to continue in the queue, the Interconnection Customer must sign and execute aSmall Generator Interconnection Agreement within ninety (90) calendar days of receiving the final report and post the required Interconnection Financial Security as set forth in Section 9.3 of Appendix Y.

Appendix 9 Certification Codes and Standards

<u>IEEE1547 Standard for Interconnecting Distributed Resources with Electric Power Systems (including use of IEEE 1547.1 testing protocols to establish conformity)</u>

<u>UL 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems</u>

IEEE Std 929-2000 IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems

NFPA 70 (2002), National Electrical Code

<u>IEEE Std C37.90.1-1989 (R1994), IEEE Standard Surge Withstand Capability (SWC) Tests for Protective</u> Relays and Relay Systems

IEEE Std C37.90.2 (1995), IEEE Standard Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers

IEEE Std C37.108-1989 (R2002), IEEE Guide for the Protection of Network Transformers

IEEE Std C57.12.44-2000, IEEE Standard Requirements for Secondary Network Protectors

IEEE Std C62.41.2-2002, IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000V and Less) AC Power Circuits

IEEE Std C62.45-1992 (R2002), IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000V and Less) AC Power Circuits

ANSI C84.1-1995 Electric Power Systems and Equipment – Voltage Ratings (60 Hertz)

IEEE Std 100-2000, IEEE Standard Dictionary of Electrical and Electronic Terms

NEMA MG 1-1998, Motors and Small Resources, Revision 3

<u>IEEE Std 519-1992, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems</u>

NEMA MG 1-2003 (Rev 2004), Motors and Generators, Revision 1

Appendix 10

Certification of Small Generator Equipment Packages

- Small Generating Facility equipment proposed for use separately or packaged with other equipment in an interconnection system shall be considered certified for interconnected operation if (1) it has been tested in accordance with industry standards for continuous utility interactive operation in compliance with the appropriate codes and standards referenced below by any Nationally Recognized Testing Laboratory (NRTL) recognized by the United States Occupational Safety and Health Administration to test and certify interconnection equipment pursuant to the relevant codes and standards listed in GIP Appendix 9, (2) it has been labeled and is publicly listed by such NRTL at the time of the interconnection application, and (3) such NRTL makes readily available for verification all test standards and procedures it utilized in performing such equipment certification, and, with consumer approval, the test data itself. The NRTL may make such information available on its website and by encouraging such information to be included in the manufacturer's literature accompanying the equipment.
- 2.0 The Interconnection Customer must verify that the intended use of the equipment falls within the use or uses for which the equipment was tested, labeled, and listed by the NRTL.
- 3.0 Certified equipment shall not require further type-test review, testing, or additional equipment to meet the requirements of this interconnection procedure; however, nothing herein shall preclude the need for an on-site commissioning test by the parties to the interconnection nor follow-up production testing by the NRTL.
- 4.0 If the certified equipment package includes only interface components (switchgear, inverters, or other interface devices), then an Interconnection Customer must show that the generator or other electric source being utilized with the equipment package is compatible with the equipment package and is consistent with the testing and listing specified for this type of interconnection equipment.
- 5.0 Provided the generator or electric source, when combined with the equipment package, is within the range of capabilities for which it was tested by the NRTL, and does not violate the interface components' labeling and listing performed by the NRTL, no further design review, testing or additional equipment on the customer side of the point of common coupling shall be required to meet the requirements of this interconnection procedure.
- 6.0 An equipment package does not include equipment provided by the utility.
- 7.0 Any equipment package approved and listed in a state by that state's regulatory body for interconnected operation in that state prior to the effective date of these small generator interconnection procedures shall be considered certified under these procedures for use in that state.

* * *

Appendix Z LGIA For Interconnection Requests Process Under the GIP

LARGE GENERATOR INTERCONNECTION AGREEMENT (LGIA)

[INTERCONNECTION CUSTOMER]

[PARTICIPATING TO]

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

TABLE OF CONTENTS

ARTICLE 1. DEFINITIONS

ARTICLE 2. EFFECTIVE DATE, TERM AND TERMINATION

- 2.1 Effective Date
- 2.2 Term of Agreement
- 2.3 Termination Procedures
 - 2.3.1 Written Notice
 - 2.3.2 Default
 - 2.3.3 Suspension of Work
 - 2.3.4
- 2.4 Termination Costs
 - 2.4.1
 - 2.4.2
 - 2.4.3
- 2.5 Disconnection
- 2.6 Survival

ARTICLE 3. REGULATORY FILINGS AND CAISO TARIFF COMPLIANCE

- 3.1 Filing
- 3.2 Agreement Subject to CAISO Tariff
- 3.3 Relationship Between this LGIA and the CAISO Tariff
- 3.4 Relationship Between this LGIA and the QF PGA

ARTICLE 4. SCOPE OF SERVICE

- 4.1 Interconnection Service
- 4.2 Provision of Service
- 4.3 Performance Standards
- 4.4 No Transmission Service
- 4.5 Interconnection Customer Provided Services

ARTICLE 5. INTERCONNECTION FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION

- 5.1 Options
 - 5.1.1 Standard Option
 - 5.1.2 Alternate Option
 - 5.1.3 Option to Build
 - 5.1.4 Negotiated Option
- 5.2 General Conditions Applicable to Option to Build
- 5.3 Liquidated Damages
- 5.4 Power System Stabilizers

- 5.5 Equipment Procurement
 - 5.5.1
 - 5.5.2
 - 5.5.3
- 5.6 Construction Commencement
 - 5.6.1
 - 5.6.2
 - 5.6.3
 - 5.6.4
- 5.7 Work Progress
- 5.8 Information Exchange
- 5.9 Limited Operation
- 5.10 Interconnection Customer's Interconnection Facilities
 - 5.10.1 Large Generating Facility and Interconnection Customer's Interconnection Facilities Specifications
 - 5.10.2 Participating TO's and CAISO's Review
 - 5.10.3 Interconnection Customer's Interconnection Facilities Construction
 - 5.10.4 Interconnection Customer to Meet Requirements of the Participating TO's Interconnection Handbook
- 5.11 Participating TO's Interconnection Facilities Construction
- 5.12 Access Rights
- 5.13 Lands of Other Property Owners
- 5.14 Permits
- 5.15 Early Construction of Base Case Facilities
- 5.16 Suspension
- 5.17 Taxes
 - 5.17.1 Interconnection Customer Payments Not Taxable
 - 5.17.2 Representations And Covenants
 - 5.17.3 Indemnification for the Cost Consequences of Current Tax Liability Imposed Upon the Participating TO
 - 5.17.4 Tax Gross-Up Amount
 - 5.17.5 Private Letter Ruling or Change or Clarification of Law
 - 5.17.6 Subsequent Taxable Events
 - 5.17.7 Contests
 - 5.17.8 Refund
 - 5.17.9 Taxes Other Than Income Taxes
- 5.18 Tax Status
- 5.19 Modification
 - 5.19.1 General
 - 5.19.2 Standards
 - 5.19.3 Modification Costs

ARTICLE 6. TESTING AND INSPECTION

- 6.1 Pre-Commercial Operation Date Testing and Modifications
- 6.2 Post-Commercial Operation Date Testing and Modifications
- 6.3 Right to Observe Testing
- 6.4 Right to Inspect

ARTICLE 7. METERING

- 7.1 General
- 7.2 Check Meters
- 7.3 Participating TO Retail Metering

ARTICLE 8. COMMUNICATIONS

8.1 Interconnection Customer Obligations

- 8.2 Remote Terminal Unit
- 8.3 No Annexation

ARTICLE 9. OPERATIONS

- 9.1 General
- 9.2 Balancing Authority Area Notification
- 9.3 CAISO and Participating TO Obligations
- 9.4 Interconnection Customer Obligations
- 9.5 Start-Up and Synchronization
- 9.6 Reactive Power
 - 9.6.1 Power Factor Design Criteria
 - 9.6.2 Voltage Schedules
 - 9.6.2.1 Governors and Regulators
 - 9.6.3 Payment for Reactive Power
- 9.7 Outages and Interruptions
 - 9.7.1 Outages
 - 9.7.1.1 Outage Authority and Coordination
 - 9.7.1.2 Outage Schedules
 - 9.7.1.3 Outage Restoration
 - 9.7.2 Interruption of Service
 - 9.7.2.1
 - 9.7.2.2
 - 9.7.2.3
 - 9.7.2.4
 - 9.7.2.5
 - 9.7.3 Under-Frequency and Over-Frequency Conditions
 - 9.7.4 System Protection and Other Control Requirements
 - 9.7.4.1 System Protection Facilities
 - 9.7.4.2
 - 9.7.4.3
 - 9.7.4.4
 - 9.7.4.5
 - 9.7.4.6
 - 9.7.5 Requirements for Protection
 - 9.7.6 Power Quality
- 9.8 Switching and Tagging Rules
- 9.9 Use of Interconnection Facilities by Third Parties
 - 9.9.1 Purpose of Interconnection Facilities
 - 9.9.2 Third Party Users
- 9.10 Disturbance Analysis Data Exchange

ARTICLE 10. MAINTENANCE

- 10.1 Participating TO Obligations
- 10.2 Interconnection Customer Obligations
- 10.3 Coordination
- 10.4 Secondary Systems
- 10.5 Operating and Maintenance Expenses

ARTICLE 11. PERFORMANCE OBLIGATION

- 11.1 Interconnection Customer's Interconnection Facilities
- 11.2 Participating TO's Interconnection Facilities
- 11.3 Network Upgrades and Distribution Upgrades
- 11.4 Transmission Credits
 - 11.4.1 Repayment of Amounts Advanced for Network Upgrades
 - 11.4.2 Special Provisions for Affected Systems

11.4.3

11.5 Provision of Security

11.5.1

11.5.2

11.5.3

11.6 Interconnection Customer Compensation

11.6.1 Interconnection Customer Compensation for Actions During Emergency Condition

ARTICLE 12. INVOICE

- 12.1 General
- 12.2 Final Invoice
- 12.3 Payment
- 12.4 Disputes

ARTICLE 13. EMERGENCIES

- 13.1 [Reserved]
- 13.2 Obligations
- 13.3 Notice
- 13.4 Immediate Action
- 13.5 CAISO and Participating TO Authority
 - 13.5.1 General
 - 13.5.2 Reduction and Disconnection
- 13.6 Interconnection Customer Authority
- 13.7 Limited Liability

ARTICLE 14. REGULATORY REQUIREMENTS AND GOVERNING LAWS

- 14.1 Regulatory Requirements
- 14.2 Governing Law

14.2.1

14.2.2

14.2.3

ARTICLE 15. NOTICES

- 15.1 General
- 15.2 Billings and Payments
- 15.3 Alternative Forms of Notice
- 15.4 Operations and Maintenance Notice

ARTICLE 16. FORCE MAJEURE

16.1 Force Majeure

16.1.1

16.1.2

ARTICLE 17. DEFAULT

17.1 Default

17.1.1 General

17.1.2 Right to Terminate

ARTICLE 18. INDEMNITY, CONSEQUENTIAL DAMAGES, AND INSURANCE

18.1 Indemnity

18.1.1 Indemnified Party

18.1.2 Indemnifying Party

18.1.3 Indemnity Procedures

18.2 Consequential Damages

18.3 Insurance

18.3.1

18.3.2

18.3.3

10.0.0

18.3.4

18.3.5 18.3.6

10.3.0

18.3.7

18.3.8

18.3.9

18.3.10

18.3.11

ARTICLE 19. ASSIGNMENT

19.1 Assignment

ARTICLE 20. SEVERABILITY

20.1 Severability

ARTICLE 21. COMPARABILITY

21.1 Comparability

ARTICLE 22. CONFIDENTIALITY

22.1 Confidentiality

22.1.1 Term

22.1.2 Scope

22.1.3 Release of Confidential Information

22.1.4 Rights

22.1.5 No Warranties

22.1.6 Standard of Care

22.1.7 Order of Disclosure

22.1.8 Termination of Agreement

22.1.9 Remedies

22.1.10 Disclosure to FERC, its Staff, or a State

22.1.11

ARTICLE 23. ENVIRONMENTAL RELEASES

23.1

ARTICLE 24. INFORMATION REQUIREMENTS

24.1 Information Acquisition

24.2 Information Submission by Participating TO

24.3 Updated Information Submission by Interconnection Customer

24.4 Information Supplementation

ARTICLE 25. INFORMATION ACCESS AND AUDIT RIGHTS

25.1 Information Access

25.2 Reporting of Non-Force Majeure Events

25.3 Audit Rights

25.3.1

25.3.2

25.4 Audit Rights Periods

25.4.1 Audit Rights Period for Construction-Related

Accounts and Records

25.4.2 Audit Rights Period for All Other

Accounts and Records

ARTICLE 26. SUBCONTRACTORS

26.1 General

26.2 Responsibility of Principal

26.3 No Limitation by Insurance

ARTICLE 27. DISPUTES

27.1 Submission

27.2 External Arbitration Procedures

27.3 Arbitration Decisions

27.4 Costs

ARTICLE 28. REPRESENTATIONS, WARRANTIES AND COVENANTS

28.1 General

28.1.1 Good Standing

28.1.2 Authority

28.1.3 No Conflict

28.1.4 Consent and Approval

ARTICLE 29. [RESERVED]

ARTICLE 30. MISCELLANEOUS

30.1 Binding Effect

30.2 Conflicts

30.3 Rules of Interpretation

30.4 Entire Agreement

30.5 No Third Party Beneficiaries

30.6 Waiver

30.7 Headings

30.8 Multiple Counterparts

30.9 Amendment

30.10 Modification by the Parties

30.11 Reservation of Rights

30.12 No Partnership

30.13 Joint and Several Obligations

Appendices

Appendix A Interconnection Facilities, Network Upgrades and Distribution Upgrades

Appendix B Milestones

Appendix C Interconnection Details

Appendix D Security Arrangements Details

Appendix E Commercial Operation Date

Appendix F Addresses for Delivery of Notices and Billings

Appendix G Interconnection Customer's Proportional Share of Costs of Network Upgrades for

Applicable Project Group

Appendix H Interconnection Requirements for a Wind Generating Plant

LARGE GENERATOR INTERCONNECTION AGREEMENT

[INTERCONNECTION CUSTOMER]

[PARTICIPATING TO]

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

THIS LARGE GENERATOR INTERCONNECTION AGREEMENT ("LGIA") is made and entered into this day of 20, by and among, a organized and existing under the laws of the State/Commonwealth of ("Interconnection Customer" with a Large Generating Facility),, a corporation organized and existing under the laws of the State of California ("Participating TO"), and California Independent System Operator Corporation, a California nonprofit public benefit corporation organized and existing under the laws of the State of California ("CAISO"). Interconnection Customer, Participating TO, and CAISO each may be referred to as a "Party" or collectively as the "Parties."
RECITALS
WHEREAS, CAISO exercises Operational Control over the CAISO Controlled Grid; and
WHEREAS, the Participating TO owns, operates, and maintains the Participating TO's Transmission System; and
WHEREAS, Interconnection Customer intends to own, lease and/or control and operate the Generating Facility identified as a Large Generating Facility in Appendix C to this LGIA; and
WHEREAS, Interconnection Customer, Participating TO, and CAISO have agreed to enter into this LGIA for the purpose of interconnecting the Large Generating Facility with the Participating TO's Transmission System;
NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein, it is agreed:
When used in this LGIA, terms with initial capitalization that are not defined in Article 1 shall have the meanings specified in the Article in which they are used.
Article 1. Definitions
Adverse System Impact shall mean the negative effects due to technical or operational limits on conductors or equipment being exceeded that may compromise the safety and reliability of the electric

Affected System shall mean an electric system other than the CAISO Controlled Grid that may be affected by the proposed interconnection, including the Participating TO's electric system that is not part of the CAISO Controlled Grid.

system.

Affiliate shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

Applicable Laws and Regulations shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

Applicable Reliability Council shall mean the Western Electricity Coordinating Council or its successor.

Applicable Reliability Standards shall mean the requirements and guidelines of NERC, the Applicable Reliability Council, and the Balancing Authority Area of the Participating TO's Transmission System to which the Generating Facility is directly connected, including requirements adopted pursuant to Section 215 of the Federal Power Act.

Balancing Authority shall mean the responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.

Balancing Authority Area shall mean the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.

Base Case shall mean the base case power flow, short circuit, and stability data bases used for the Interconnection Studies.

Breach shall mean the failure of a Party to perform or observe any material term or condition of this LGIA.

Breaching Party shall mean a Party that is in Breach of this LGIA.

Business Day shall mean Monday through Friday, excluding federal holidays and the day after Thanksgiving Day.

CAISO Controlled Grid shall mean the system of transmission lines and associated facilities of the parties to the Transmission Control Agreement that have been placed under the CAISO's Operational Control.

CAISO Tariff shall mean the CAISO's tariff, as filed with FERC, and as amended or supplemented from time to time, or any successor tariff.

Calendar Day shall mean any day including Saturday, Sunday or a federal holiday.

Commercial Operation shall mean the status of an Electric Generating Unit or project phase at a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

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

Confidential Information shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, subject to Article 22.1.2.

Default shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of this LGIA.

Distribution System shall mean those non-CAISO-controlled transmission and distribution facilities owned by the Participating TO.

Distribution Upgrades shall mean the additions, modifications, and upgrades to the Participating TO's Distribution System. Distribution Upgrades do not include Interconnection Facilities.

Effective Date shall mean the date on which this LGIA becomes effective upon execution by all Parties subject to acceptance by FERC, or if filed unexecuted, upon the date specified by FERC.

Electric Generating Unit shall mean an individual electric generator and its associated plant and apparatus whose electrical output is capable of being separately identified and metered.

Emergency Condition shall mean a condition or situation: (1) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (2) that, in the case of the CAISO, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the CAISO Controlled Grid or the electric systems of others to which the CAISO Controlled Grid is directly connected; (3) that, in the case of the Participating TO, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Participating TO's Transmission System, Participating TO's Interconnection Facilities, Distribution System, or the electric systems of others to which the Participating TO's electric system is directly connected; or (4) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions; provided, that Interconnection Customer is not obligated by this LGIA to possess black start capability.

Environmental Law shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

Federal Power Act shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a et seq.

FERC shall mean the Federal Energy Regulatory Commission or its successor.

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

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

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

Generator Interconnection Procedures (GIP) shall mean the CAISO protocol that sets forth the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that is included in CAISO Tariff Appendix Y.

<u>Generator Interconnection Study Process Agreement</u> shall mean the agreement between the Interconnection Customer and the CAISO for the conduct of the Interconnection Studies.

Good Utility Practice shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be any one of a number of the optimum practices, methods, or acts to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

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

Governing Independent Study Process Interconnection Studies shall mean the engineering study(ies) conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), that evaluates the impact of the proposed interconnection on the safety and reliability of the Participating TO's Transmission System and, if applicable, an Affected System, which shall consist primarily of a Facilities Study as described in Section 4.5 of the Generation Interconnection Procedures or a System Impact Study as described in Section 4.4 of the Generation Interconnection Procedures.

Hazardous Substances shall mean any chemicals, materials or substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," "hazardous constituents," "restricted hazardous materials," "extremely hazardous substances," "toxic substances," "radioactive substances," "contaminants," "pollutants," "toxic pollutants" or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

Initial Synchronization Date shall mean the date upon which an Electric Generating Unit is initially synchronized and upon which Trial Operation begins.

In-Service Date shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Participating TO's Interconnection Facilities to obtain back feed power.

Interconnection Customer's Interconnection Facilities shall mean all facilities and equipment, as identified in Appendix A of this LGIA, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Participating TO's Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

Interconnection Facilities shall mean the Participating TO's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Participating TO's Transmission System. Interconnection Facilities are sole use

facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

Interconnection Financial Security shall mean any ofhave the financial instruments listed meaning assigned to it in Section 9.1 -2 of the GIP that are posted by an Interconnection Customer LGIP.

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

Interconnection Request shall mean a request, in the form of Appendix 1 to the Large Generator Interconnection Procedures, in accordance with the CAISO Tariff.

Interconnection Service shall mean the service provided by the Participating TO and CAISO associated with interconnecting the Interconnection Customer's Generating Facility to the Participating TO's Transmission System and enabling the CAISO Controlled Grid to receive electric energy and capacity from the Generating Facility at the Point of Interconnection, pursuant to the terms of this LGIA, the Participating TO's Transmission Owner Tariff, and the CAISO Tariff.

Interconnection Study shall mean

- (i) For Interconnection Requests processed under the Cluster Study Process described in the Generation Interconnection Procedures. either of the following studies: the Phase I Interconnection Study or the Phase II Interconnection Study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), pursuant to the Large-Generator Interconnection Procedures;
- (ii) For Interconnection Requests processed under the Independent Study Process
 described in the Generation Interconnection Procedures, the governing study(ies)
 conducted or caused to be performed by the CAISO, in coordination with the applicable
 Participating TO(s), pursuant to the Generation Interconnection Procedures, which shall
 consist primarily of a Facilities Study as described in Section 4.5 of the GIP or a System
 Impact Study as described in Section 4.4 of the GIP.

IRS shall mean the Internal Revenue Service.

Large Generating Facility shall mean a Generating Facility having a Generating Facility Capacity of more than 20 MW.

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

Large Generator Interconnection Study Process Agreement shall mean the agreement between the Interconnection Customer and the CAISO for the conduct of the Interconnection Studies.

Loss shall mean any and all damages, losses, and claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties.

Material Modification shall mean those modifications that have a material impact on the cost or timing of any Interconnection Request or any other valid interconnection request with a later queue priority date.

Metering Equipment shall mean all metering equipment installed or to be installed for measuring the output of the Generating Facility pursuant to this LGIA at the metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

NERC shall mean the North American Electric Reliability Council or its successor organization.

Network Upgrades shall be Participating TO's Delivery Network Upgrades and Participating TO's Reliability Network Upgrades.

Operational Control shall mean the rights of the CAISO under the Transmission Control Agreement and the CAISO Tariff to direct the parties to the Transmission Control Agreement how to operate their transmission lines and facilities and other electric plant affecting the reliability of those lines and facilities for the purpose of affording comparable non-discriminatory transmission access and meeting applicable reliability criteria.

Participating TO's Delivery Network Upgrades shall mean the additions, modifications, and upgrades to the Participating TO's Transmission System at or beyond the Point of Interconnection, other than Reliability Network Upgrades, identified in the Interconnection Studies, as identified in Appendix A, to relieve constraints on the CAISO Controlled Grid.

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

Participating TO's Reliability Network Upgrades shall mean the additions, modifications, and upgrades to the Participating TO's Transmission System at or beyond the Point of Interconnection, identified in the Interconnection Studies, as identified in Appendix A, necessary to interconnect the Large Generating Facility safely and reliably to the Participating TO's Transmission System, which would not have been necessary but for the interconnection of the Large Generating Facility, including additions, modifications, and upgrades necessary to remedy short circuit or stability problems resulting from the interconnection of the Large Generating Facility to the Participating TO's Transmission System. Participating TO's Reliability Network Upgrades also include, consistent with Applicable Reliability Standards and Applicable Reliability Council practice, the Participating TO's facilities necessary to mitigate any adverse impact the Large Generating Facility's interconnection may have on a path's Applicable Reliability Council rating. Participating TO's Reliability Network Upgrades do not include any Participating TO's Delivery Network Upgrades.

Participating TO's Transmission System shall mean the facilities owned and operated by the Participating TO and that have been placed under the CAISO's Operational Control, which facilities form part of the CAISO Controlled Grid.

Party or Parties shall mean the Participating TO, CAISO, Interconnection Customer or the applicable combination of the above.

Phase I Interconnection Study shall mean the engineering study conducted or caused to be performed by the CAISO, in coordination with the applicable Participating TO(s), that evaluates the impact of the proposed interconnection on the safety and reliability of the Participating TO's Transmission System and, if applicable, an Affected System. The study shall identify and detail the system impacts that

would result if the Generating Facility(ies) were interconnected without identified project modifications or system modifications, as provided in the On-Peak Deliverability Assessment (as defined in the CAISO Tariff), and other potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Large Generator Interconnection Procedures. The study will also identify the approximate total costs, based on per unit costs, of mitigating these impacts, along with an equitable allocation of those costs to Interconnection Customers for their individual Generating Facilities.

Phase II Interconnection Study shall mean an engineering and operational study conducted or caused to be performed by the CAISO once per calendar year, in coordination with the applicable Participating TO(s), to determine the Point of Interconnection and a list of facilities (including the Participating TO's Interconnection Facilities, Network Upgrades, Distribution Upgrades, and Stand Alone Network Upgrades), the cost of those facilities, and the time required to interconnect the Generating Facility(ies) with the Participating TO's Transmission System.

Point of Change of Ownership shall mean the point, as set forth in Appendix A to this LGIA, where the Interconnection Customer's Interconnection Facilities connect to the Participating TO's Interconnection Facilities.

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

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

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

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

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

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

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

Transmission Control Agreement shall mean CAISO FERC Electric Tariff No. 7.

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

Article 2. Effective Date, Term And Termination

- **2.1 Effective Date.** This LGIA shall become effective upon execution by all Parties subject to acceptance by FERC (if applicable), or if filed unexecuted, upon the date specified by FERC. The CAISO and Participating TO shall promptly file this LGIA with FERC upon execution in accordance with Article 3.1, if required.
- **2.2 Term of Agreement.** Subject to the provisions of Article 2.3, this LGIA shall remain in effect for a period of _____ years from the Effective Date (Term Specified in Individual Agreements to be ten (10) years or such other longer period as the Interconnection Customer may request) and shall be automatically renewed for each successive one-year period thereafter.

2.3 Termination Procedures.

- **2.3.1 Written Notice.** This LGIA may be terminated by the Interconnection Customer after giving the CAISO and the Participating TO ninety (90) Calendar Days advance written notice, or by the CAISO and the Participating TO notifying FERC after the Generating Facility permanently ceases Commercial Operation.
- **2.3.2 Default.** A Party may terminate this LGIA in accordance with Article 17.
- **2.3.3 Suspension of Work.** This LGIA may be deemed terminated in accordance with Article 5.16.
- 2.3.4 Notwithstanding Articles 2.3.1, 2.3.2, and 2.3.3, no termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with FERC of a notice of termination of this LGIA (if applicable), which notice has been accepted for filing by FERC, and the Interconnection Customer has fulfilled its termination cost obligations under Article 2.4.
- **2.4 Termination Costs.** Immediately upon the other Parties' receipt of a notice of the termination of this LGIA pursuant to Article 2.3 above, the CAISO and the Participating TO will determine the total cost responsibility of the Interconnection Customer. If, as of the date of the other Parties' receipt of the notice of termination, the Interconnection Customer has not already paid its share of Network Upgrade costs, as set forth in Appendix G to this LGIA, the Participating TO will liquidate the Interconnection Customer's Interconnection Financial Security associated with its cost responsibility for Network Upgrades, in accordance with Section 9.4 of the GIPLGIP.

The Interconnection Customer will also be responsible for all costs incurred or irrevocably committed to be incurred in association with the construction of the Participating TO's Interconnection Facilities (including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment) and other such expenses, including any Distribution Upgrades for which the Participating TO or CAISO has incurred expenses or has irrevocably committed to incur expenses and has not been reimbursed by the Interconnection Customer, as of the date of the other Parties' receipt of the notice of termination, subject to the limitations set forth in this Article 2.4. Nothing in this Article 2.4 shall limit the Parties' rights under Article 17. If, as of the date of the other Parties' receipt of the notice of termination, the Interconnection Customer has not already reimbursed the Participating TO and the CAISO for costs incurred to construct the Participating TO's Interconnection Facilities, the Participating TO will liquidate the Interconnection Customer's Interconnection Financial Security associated with the construction of the Participating TO's Interconnection Facilities, in accordance with Section 9.4 of the GIPLGIP. If the amount of the Interconnection Financial Security liquidated by the Participating TO under this Article 2.4 is insufficient to compensate the CAISO and the Participating TO for actual costs

associated with the construction of the Participating TO's Interconnection Facilities contemplated in this Article, any additional amounts will be the responsibility of the Interconnection Customer, subject to the provisions of Section 9.4 of the GIPLGIP. Any such additional amounts due from the Interconnection Customer beyond the amounts covered by its Interconnection Financial Security will be due to the Participating TO immediately upon termination of this LGIA in accordance with Section 9.4 of the GIPLGIP.

If the amount of the Interconnection Financial Security exceeds the Interconnection Customer's cost responsibility under Section 9.4 of the GIPLGIP, any excess amount will be released to the Interconnection Customer in accordance with Section 9.4 of the GIPLGIP.

- Notwithstanding the foregoing, in the event of termination by a Party, all Parties shall use commercially Reasonable Efforts to mitigate the costs, damages and charges arising as a consequence of termination. With respect to any portion of the Participating TO's Interconnection Facilities that have not yet been constructed or installed, the Participating TO shall to the extent possible and with the Interconnection Customer's authorization cancel any pending orders of, or return, any materials or equipment for, or contracts for construction of, such facilities; provided that in the event the Interconnection Customer elects not to authorize such cancellation, the Interconnection Customer shall assume all payment obligations with respect to such materials, equipment, and contracts, and the Participating TO shall deliver such material and equipment, and, if necessary, assign such contracts, to the Interconnection Customer as soon as practicable, at the Interconnection Customer's expense. To the extent that the Interconnection Customer has already paid the Participating TO for any or all such costs of materials or equipment not taken by the Interconnection Customer, the Participating TO shall promptly refund such amounts to the Interconnection Customer, less any costs, including penalties, incurred by the Participating TO to cancel any pending orders of or return such materials, equipment, or contracts.
- 2.4.2 The Participating TO may, at its option, retain any portion of such materials, equipment, or facilities that the Interconnection Customer chooses not to accept delivery of, in which case the Participating TO shall be responsible for all costs associated with procuring such materials, equipment, or facilities.
- 2.4.3 With respect to any portion of the Interconnection Facilities, and any other facilities already installed or constructed pursuant to the terms of this LGIA, Interconnection Customer shall be responsible for all costs associated with the removal, relocation or other disposition or retirement of such materials, equipment, or facilities.
- **2.5 Disconnection.** Upon termination of this LGIA, the Parties will take all appropriate steps to disconnect the Large Generating Facility from the Participating TO's Transmission System. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this LGIA or such non-terminating Party otherwise is responsible for these costs under this LGIA.
- **Survival.** This LGIA shall continue in effect after termination to the extent necessary to provide for final billings and payments and for costs incurred hereunder, including billings and payments pursuant to this LGIA; to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this LGIA was in effect; and to permit each Party to have access to the lands of the other Parties pursuant to this LGIA or other applicable agreements, to disconnect, remove or salvage its own facilities and equipment.

Article 3. Regulatory Filings And CAISO Tariff Compliance

3.1 Filing. The Participating TO and the CAISO shall file this LGIA (and any amendment hereto) with the appropriate Governmental Authority(ies), if required. The Interconnection Customer may request that any information so provided be subject to the confidentiality provisions of Article 22.

If the Interconnection Customer has executed this LGIA, or any amendment thereto, the Interconnection Customer shall reasonably cooperate with the Participating TO and CAISO with respect to such filing and to provide any information reasonably requested by the Participating TO or CAISO needed to comply with applicable regulatory requirements.

- **3.2** Agreement Subject to CAISO Tariff. The Interconnection Customer will comply with all applicable provisions of the CAISO Tariff, including the GIPLGIP.
- 3.3 Relationship Between this LGIA and the CAISO Tariff. With regard to rights and obligations between the Participating TO and the Interconnection Customer, if and to the extent a matter is specifically addressed by a provision of this LGIA (including any appendices, schedules or other attachments to this LGIA), the provisions of this LGIA shall govern. If and to the extent a provision of this LGIA is inconsistent with the CAISO Tariff and dictates rights and obligations between the CAISO and the Participating TO or the CAISO and the Interconnection Customer, the CAISO Tariff shall govern.
- **3.4** Relationship Between this LGIA and the QF PGA. With regard to the rights and obligations of a Qualifying Facility that has entered into a QF PGA with the CAISO and has entered into this LGIA, if and to the extent a matter is specifically addressed by a provision of the QF PGA that is inconsistent with this LGIA, the terms of the QF PGA shall govern.

Article 4. Scope Of Service

4.1 Interconnection Service. Interconnection Service allows the Interconnection Customer to connect the Large Generating Facility to the Participating TO's Transmission System and be eligible to deliver the Large Generating Facility's output using the available capacity of the CAISO Controlled Grid. To the extent the Interconnection Customer wants to receive Interconnection Service, the Participating TO shall construct facilities identified in Appendices A and C that the Participating TO is responsible to construct.

Interconnection Service does not necessarily provide the Interconnection Customer with the capability to physically deliver the output of its Large Generating Facility to any particular load on the CAISO Controlled Grid without incurring congestion costs. In the event of transmission constraints on the CAISO Controlled Grid, the Interconnection Customer's Large Generating Facility shall be subject to the applicable congestion management procedures in the CAISO Tariff in the same manner as all other resources.

- **4.2 Provision of Service.** The Participating TO and the CAISO shall provide Interconnection Service for the Large Generating Facility.
- 4.3 Performance Standards. Each Party shall perform all of its obligations under this LGIA in accordance with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice, and to the extent a Party is required or prevented or limited in taking any action by such regulations and standards, such Party shall not be deemed to be in Breach of this LGIA for its compliance therewith. If such Party is the CAISO or Participating TO, then that Party shall amend the LGIA and submit the amendment to FERC for approval.
- **4.4 No Transmission Service.** The execution of this LGIA does not constitute a request for, nor the provision of, any transmission service under the CAISO Tariff, and does not convey any right to deliver electricity to any specific customer or point of delivery.
- 4.5 Interconnection Customer Provided Services. The services provided by Interconnection Customer under this LGIA are set forth in Article 9.6 and Article 13.5.1. Interconnection Customer shall be paid for such services in accordance with Article 11.6.

Article 5. Facilities Engineering, Procurement, And Construction

Interconnection Facilities, Network Upgrades, and Distribution Upgrades shall be studied, designed, and constructed pursuant to Good Utility Practice. Such studies, design and construction shall be based on the assumed accuracy and completeness of all technical information received by the Participating TO and the CAISO from the Interconnection Customer associated with interconnecting the Large Generating Facility.

- 5.1 Options. Unless otherwise mutually agreed among the Parties, the Interconnection Customer shall select the In-Service Date, Initial Synchronization Date, and Commercial Operation Date; and either Standard Option or Alternate Option set forth below for completion of the Participating TO's Interconnection Facilities and Network Upgrades as set forth in Appendix A, Interconnection Facilities, Network Upgrades, and Distribution Upgrades, and such dates and selected option shall be set forth in Appendix B, Milestones.
 - 5.1.1 Standard Option. The Participating TO shall design, procure, and construct the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, using Reasonable Efforts to complete the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades by the dates set forth in Appendix B, Milestones. The Participating TO shall not be required to undertake any action which is inconsistent with its standard safety practices, its material and equipment specifications, its design criteria and construction procedures, its labor agreements, and Applicable Laws and Regulations. In the event the Participating TO reasonably expects that it will not be able to complete the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades by the specified dates, the Participating TO shall promptly provide written notice to the Interconnection Customer and the CAISO and shall undertake Reasonable Efforts to meet the earliest dates thereafter.
 - **5.1.2** Alternate Option. If the dates designated by the Interconnection Customer are acceptable to the Participating TO, the Participating TO shall so notify the Interconnection Customer within thirty (30) Calendar Days, and shall assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities by the designated dates.

If the Participating TO subsequently fails to complete the Participating TO's Interconnection Facilities by the In-Service Date, to the extent necessary to provide back feed power; or fails to complete Network Upgrades by the Initial Synchronization Date to the extent necessary to allow for Trial Operation at full power output, unless other arrangements are made by the Parties for such Trial Operation; or fails to complete the Network Upgrades by the Commercial Operation Date, as such dates are reflected in Appendix B, Milestones; the Participating TO shall pay the Interconnection Customer liquidated damages in accordance with Article 5.3, Liquidated Damages, provided, however, the dates designated by the Interconnection Customer shall be extended day for day for each day that the CAISO refuses to grant clearances to install equipment.

5.1.3 Option to Build. If the dates designated by the Interconnection Customer are not acceptable to the Participating TO, the Participating TO shall so notify the Interconnection Customer within thirty (30) Calendar Days, and unless the Parties agree otherwise, the Interconnection Customer shall have the option to assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades. If the Interconnection Customer elects to exercise its option to assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, it shall so notify the Participating TO within thirty (30) Calendar Days of receipt of the Participating TO's notification that the designated dates are not acceptable to the Participating TO. The Participating TO, CAISO, and Interconnection Customer must

agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Appendix A to this LGIA. Except for Stand Alone Network Upgrades, the Interconnection Customer shall have no right to construct Network Upgrades under this option.

- 5.1.4 Negotiated Option. If the Interconnection Customer elects not to exercise its option under Article 5.1.3, Option to Build, the Interconnection Customer shall so notify the Participating TO within thirty (30) Calendar Days of receipt of the Participating TO's notification that the designated dates are not acceptable to the Participating TO, and the Parties shall in good faith attempt to negotiate terms and conditions (including revision of the specified dates and liquidated damages, the provision of incentives or the procurement and construction of a portion of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades by the Interconnection Customer) pursuant to which the Participating TO is responsible for the design, procurement and construction of the Participating TO's Interconnection Facilities and Network Upgrades. If the Parties are unable to reach agreement on such terms and conditions, the Participating TO shall assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Network Upgrades pursuant to Article 5.1.1, Standard Option.
- **5.2 General Conditions Applicable to Option to Build.** If the Interconnection Customer assumes responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades,
 - (1) the Interconnection Customer shall engineer, procure equipment, and construct the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by the Participating TO;
 - (2) The Interconnection Customer's engineering, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law to which the Participating TO would be subject in the engineering, procurement or construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades:
 - (3) the Participating TO shall review, and the Interconnection Customer shall obtain the Participating TO's approval of, the engineering design, equipment acceptance tests, and the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, which approval shall not be unreasonably withheld, and the CAISO may, at its option, review the engineering design, equipment acceptance tests, and the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;
 - (4) prior to commencement of construction, the Interconnection Customer shall provide to the Participating TO, with a copy to the CAISO for informational purposes, a schedule for construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, and shall promptly respond to requests for information from the Participating TO;
 - (5) at any time during construction, the Participating TO shall have the right to gain unrestricted access to the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;
 - (6) at any time during construction, should any phase of the engineering, equipment procurement, or construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by

the Participating TO, the Interconnection Customer shall be obligated to remedy deficiencies in that portion of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

- (7) the Interconnection Customer shall indemnify the CAISO and Participating TO for claims arising from the Interconnection Customer's construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to Article 18.1 Indemnity;
- (8) The Interconnection Customer shall transfer control of the Participating TO's Interconnection Facilities to the Participating TO and shall transfer Operational Control of Stand Alone Network Upgrades to the CAISO;
- (9) Unless the Parties otherwise agree, the Interconnection Customer shall transfer ownership of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the Participating TO. As soon as reasonably practicable, but within twelve months after completion of the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, the Interconnection Customer shall provide an invoice of the final cost of the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the Participating TO, which invoice shall set forth such costs in sufficient detail to enable the Participating TO to reflect the proper costs of such facilities in its transmission rate base and to identify the investment upon which refunds will be provided;
- (10) the Participating TO shall accept for operation and maintenance the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2; and
- (11) The Interconnection Customer's engineering, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of the "Option to Build" conditions set forth in Appendix C. Interconnection Customer shall deliver to the Participating TO "as-built" drawings, information, and any other documents that are reasonably required by the Participating TO to assure that the Interconnection Facilities and Stand-Alone Network Upgrades are built to the standards and specifications required by the Participating TO.
- 5.3 Liquidated Damages. The actual damages to the Interconnection Customer, in the event the Participating TO's Interconnection Facilities or Network Upgrades are not completed by the dates designated by the Interconnection Customer and accepted by the Participating TO pursuant to subparagraphs 5.1.2 or 5.1.4, above, may include Interconnection Customer's fixed operation and maintenance costs and lost opportunity costs. Such actual damages are uncertain and impossible to determine at this time. Because of such uncertainty, any liquidated damages paid by the Participating TO to the Interconnection Customer in the event that the Participating TO does not complete any portion of the Participating TO's Interconnection Facilities or Network Upgrades by the applicable dates, shall be an amount equal to ½ of 1 percent per day of the actual cost of the Participating TO's Interconnection Facilities and Network Upgrades, in the aggregate, for which the Participating TO has assumed responsibility to design, procure and construct.

However, in no event shall the total liquidated damages exceed 20 percent of the actual cost of the Participating TO's Interconnection Facilities and Network Upgrades for which the Participating TO has assumed responsibility to design, procure, and construct. The foregoing payments will be made by the Participating TO to the Interconnection Customer as just compensation for the damages caused to the Interconnection Customer, which actual damages are uncertain and impossible to determine at this time, and as reasonable liquidated damages, but not as a penalty

or a method to secure performance of this LGIA. Liquidated damages, when the Parties agree to them, are the exclusive remedy for the Participating TO's failure to meet its schedule.

No liquidated damages shall be paid to the Interconnection Customer if: (1) the Interconnection Customer is not ready to commence use of the Participating TO's Interconnection Facilities or Network Upgrades to take the delivery of power for the Electric Generating Unit's Trial Operation or to export power from the Electric Generating Unit on the specified dates, unless the Interconnection Customer would have been able to commence use of the Participating TO's Interconnection Facilities or Network Upgrades to take the delivery of power for Electric Generating Unit's Trial Operation or to export power from the Electric Generating Unit, but for the Participating TO's delay; (2) the Participating TO's failure to meet the specified dates is the result of the action or inaction of the Interconnection Customer or any other interconnection customer who has entered into an interconnection agreement with the CAISO and/or Participating TO, action or inaction by the CAISO, or any cause beyond the Participating TO's reasonable control or reasonable ability to cure; (3) the Interconnection Customer has assumed responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades; or (4) the Parties have otherwise agreed.

In no event shall the CAISO have any responsibility or liability to the Interconnection Customer for liquidated damages pursuant to the provisions of this Article 5.3.

- Power System Stabilizers. The Interconnection Customer shall procure, install, maintain and operate Power System Stabilizers in accordance with Applicable Reliability Standards, the guidelines and procedures established by the Applicable Reliability Council, and the provisions of Section 4.6.5.1 of the CAISO Tariff. The CAISO reserves the right to establish reasonable minimum acceptable settings for any installed Power System Stabilizers, subject to the design and operating limitations of the Large Generating Facility. If the Large Generating Facility's Power System Stabilizers are removed from service or not capable of automatic operation, the Interconnection Customer shall immediately notify the CAISO and the Participating TO and restore the Power System Stabilizers to operation as soon as possible. The CAISO shall have the right to order the reduction in output or disconnection of the Large Generating Facility if the reliability of the CAISO Controlled Grid would be adversely affected as a result of improperly tuned Power System Stabilizers. The requirements of this Article 5.4 shall not apply to wind generators of the induction type.
- 5.5 Equipment Procurement. If responsibility for construction of the Participating TO's Interconnection Facilities or Network Upgrades is to be borne by the Participating TO, then the Participating TO shall commence design of the Participating TO's Interconnection Facilities or Network Upgrades and procure necessary equipment as soon as practicable after all of the following conditions are satisfied, unless the Parties otherwise agree in writing:
 - 5.5.1 The CAISO, in coordination with the applicable Participating TO(s), has completed the Phase II Interconnection Study or Governing Independent Study Interconnection Study pursuant to the applicable-Large Generator Interconnection Facilities Study Process Agreement or other applicable study process agreement;
 - **5.5.2** The Participating TO has received written authorization to proceed with design and procurement from the Interconnection Customer by the date specified in Appendix B, Milestones; and
 - **5.5.3** The Interconnection Customer has provided security to the Participating TO in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.
- **Construction Commencement.** The Participating TO shall commence construction of the Participating TO's Interconnection Facilities and Network Upgrades for which it is responsible as soon as practicable after the following additional conditions are satisfied:

- **5.6.1** Approval of the appropriate Governmental Authority has been obtained for any facilities requiring regulatory approval;
- 5.6.2 Necessary real property rights and rights-of-way have been obtained, to the extent required for the construction of a discrete aspect of the Participating TO's Interconnection Facilities and Network Upgrades;
- 5.6.3 The Participating TO has received written authorization to proceed with construction from the Interconnection Customer by the date specified in Appendix B, Milestones; and
- 5.6.4 The Interconnection Customer has provided payment and security to the Participating TO in accordance with Article 11.5 by the dates specified in Appendix B, Milestones.
- Work Progress. The Parties will keep each other advised periodically as to the progress of their respective design, procurement and construction efforts. Any Party may, at any time, request a progress report from another Party. If, at any time, the Interconnection Customer determines that the completion of the Participating TO's Interconnection Facilities will not be required until after the specified In-Service Date, the Interconnection Customer will provide written notice to the Participating TO and CAISO of such later date upon which the completion of the Participating TO's Interconnection Facilities will be required.
- 5.8 Information Exchange. As soon as reasonably practicable after the Effective Date, the Parties shall exchange information regarding the design and compatibility of the Interconnection Customer's Interconnection Facilities and Participating TO's Interconnection Facilities and compatibility of the Interconnection Facilities with the Participating TO's Transmission System, and shall work diligently and in good faith to make any necessary design changes.
- 5.9 Limited Operation. If any of the Participating TO's Interconnection Facilities or Network Upgrades are not reasonably expected to be completed prior to the Commercial Operation Date of the Electric Generating Unit, the Participating TO and/or CAISO, as applicable, shall, upon the request and at the expense of the Interconnection Customer, perform operating studies on a timely basis to determine the extent to which the Electric Generating Unit and the Interconnection Customer's Interconnection Facilities may operate prior to the completion of the Participating TO's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and this LGIA. The Participating TO and CAISO shall permit Interconnection Customer to operate the Electric Generating Unit and the Interconnection Customer's Interconnection Facilities in accordance with the results of such studies.
- **5.10** Interconnection Customer's Interconnection Facilities. The Interconnection Customer shall, at its expense, design, procure, construct, own and install the Interconnection Customer's Interconnection Facilities, as set forth in Appendix A.
 - 5.10.1 Large Generating Facility and Interconnection Customer's Interconnection Facilities Specifications. In addition to the Interconnection Customer's responsibility to submit technical data with its Interconnection Request as required by Section 3.5.1 of the GIPLGIP, the Interconnection Customer shall submit all remaining necessary specifications for the Interconnection Customer's Interconnection Facilities and Large Generating Facility, including System Protection Facilities, to the Participating TO and the CAISO at least one hundred eighty (180) Calendar Days prior to the Initial Synchronization Date; and final specifications for review and comment at least ninety (90) Calendar Days prior to the Initial Synchronization Date. The Participating TO and the CAISO shall review such specifications pursuant to this LGIA and the GIPLGIP to ensure that the Interconnection Customer's Interconnection Facilities and Large Generating Facility are compatible with the technical specifications, operational control, safety

requirements, and any other applicable requirements of the Participating TO and the CAISO and comment on such specifications within thirty (30) Calendar Days of the Interconnection Customer's submission. All specifications provided hereunder shall be deemed confidential.

- 5.10.2 Participating TO's and CAISO's Review. The Participating TO's and the CAISO's review of the Interconnection Customer's final specifications shall not be construed as confirming, endorsing, or providing a warranty as to the design, fitness, safety, durability or reliability of the Large Generating Facility, or the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall make such changes to the Interconnection Customer's Interconnection Facilities as may reasonably be required by the Participating TO or the CAISO, in accordance with Good Utility Practice, to ensure that the Interconnection Customer's Interconnection Facilities are compatible with the technical specifications, Operational Control, and safety requirements of the Participating TO or the CAISO.
- 5.10.3 Interconnection Customer's Interconnection Facilities Construction. The Interconnection Customer's Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Participating TO and Interconnection Customer agree on another mutually acceptable deadline, the Interconnection Customer shall deliver to the Participating TO and CAISO "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities and the Electric Generating Unit(s), such as: a one-line diagram, a site plan showing the Large Generating Facility and the Interconnection Customer's Interconnection Facilities, plan and elevation drawings showing the layout of the Interconnection Customer's Interconnection Facilities, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with the Interconnection Customer's step-up transformers, the facilities connecting the Large Generating Facility to the step-up transformers and the Interconnection Customer's Interconnection Facilities, and the impedances (determined by factory tests) for the associated step-up transformers and the Electric Generating Units. The Interconnection Customer shall provide the Participating TO and the CAISO specifications for the excitation system, automatic voltage regulator, Large Generating Facility control and protection settings, transformer tap settings, and communications, if applicable. Any deviations from the relay settings, machine specifications, and other specifications originally submitted by the Interconnection Customer shall be assessed by the Participating TO and the CAISO pursuant to the appropriate provisions of this LGIA and the GIPLGIP.
- **5.10.4** Interconnection Customer to Meet Requirements of the Participating TO's Interconnection Handbook. The Interconnection Customer shall comply with the Participating TO's Interconnection Handbook.
- 5.11 Participating TO's Interconnection Facilities Construction. The Participating TO's Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Upon request, within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Participating TO and Interconnection Customer agree on another mutually acceptable deadline, the Participating TO shall deliver to the Interconnection Customer and the CAISO the following "as-built" drawings, information and documents for the Participating TO's Interconnection Facilities [include appropriate drawings and relay diagrams].

The Participating TO will obtain control for operating and maintenance purposes of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades upon completion of such facilities. Pursuant to Article 5.2, the CAISO will obtain Operational Control of the Stand Alone Network Upgrades prior to the Commercial Operation Date.

- 5.12 Access Rights. Upon reasonable notice and supervision by a Party, and subject to any required or necessary regulatory approvals, a Party ("Granting Party") shall furnish at no cost to the other Party ("Access Party") any rights of use, licenses, rights of way and easements with respect to lands owned or controlled by the Granting Party, its agents (if allowed under the applicable agency agreement), or any Affiliate, that are necessary to enable the Access Party to obtain ingress and egress to construct, operate, maintain, repair, test (or witness testing), inspect, replace or remove facilities and equipment to: (i) interconnect the Large Generating Facility with the Participating TO's Transmission System; (ii) operate and maintain the Large Generating Facility, the Interconnection Facilities and the Participating TO's Transmission System; and (iii) disconnect or remove the Access Party's facilities and equipment upon termination of this LGIA. In exercising such licenses, rights of way and easements, the Access Party shall not unreasonably disrupt or interfere with normal operation of the Granting Party's business and shall adhere to the safety rules and procedures established in advance, as may be changed from time to time, by the Granting Party and provided to the Access Party.
- 5.13 Lands of Other Property Owners. If any part of the Participating TO's Interconnection Facilities and/or Network Upgrades are to be installed on property owned by persons other than the Interconnection Customer or Participating TO, the Participating TO shall at the Interconnection Customer's expense use efforts, similar in nature and extent to those that it typically undertakes on its own behalf or on behalf of its Affiliates, including use of its eminent domain authority, and to the extent consistent with state law, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove the Participating TO's Interconnection Facilities and/or Network Upgrades upon such property.
- **5.14 Permits.** Participating TO and Interconnection Customer shall cooperate with each other in good faith in obtaining all permits, licenses and authorization that are necessary to accomplish the interconnection in compliance with Applicable Laws and Regulations. With respect to this paragraph, the Participating TO shall provide permitting assistance to the Interconnection Customer comparable to that provided to the Participating TO's own, or an Affiliate's generation.
- 5.15 Early Construction of Base Case Facilities. The Interconnection Customer may request the Participating TO to construct, and the Participating TO shall construct, using Reasonable Efforts to accommodate Interconnection Customer's In-Service Date, all or any portion of any Network Upgrades required for Interconnection Customer to be interconnected to the Participating TO's Transmission System which are included in the Base Case of the Interconnection Studies for the Interconnection Customer, and which also are required to be constructed for another interconnection customer, but where such construction is not scheduled to be completed in time to achieve Interconnection Customer's In-Service Date.
- 5.16 Suspension. The Interconnection Customer reserves the right, upon written notice to the Participating TO and the CAISO, to suspend at any time all work associated with the construction and installation of the Participating TO's Interconnection Facilities, Network Upgrades, and/or Distribution Upgrades required under this LGIA, other than Network Upgrades identified in the Phase II Interconnection Study as common to multiple Generating Facilities, with the condition that the Participating TO's electrical system and the CAISO Controlled Grid shall be left in a safe and reliable condition in accordance with Good Utility Practice and the Participating TO's safety and reliability criteria and the CAISO's Applicable Reliability Standards. In such event, the Interconnection Customer shall be responsible for all reasonable and necessary costs which the Participating TO (i) has incurred pursuant to this LGIA prior to the suspension and (ii) incurs in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Participating TO's electric system during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and labor contracts which the Participating TO cannot reasonably avoid; provided, however, that prior to canceling or suspending any such

material, equipment or labor contract, the Participating TO shall obtain Interconnection Customer's authorization to do so.

The Participating TO shall invoice the Interconnection Customer for such costs pursuant to Article 12 and shall use due diligence to minimize its costs. In the event Interconnection Customer suspends work required under this LGIA pursuant to this Article 5.16, and has not requested the Participating TO to recommence the work or has not itself recommenced work required under this LGIA in time to ensure that the new projected Commercial Operation Date for the full Generating Facility Capacity of the Large Generating Facility is no more than three (3) years from the Commercial Operation Date identified in Appendix B hereto, this LGIA shall be deemed terminated and the Interconnection Customer's responsibility for costs will be determined in accordance with Section 2.4 of this LGIA. The suspension period shall begin on the date the suspension is requested, or the date of the written notice to the Participating TO and the CAISO, if no effective date is specified.

5.17 Taxes.

- 5.17.1 Interconnection Customer Payments Not Taxable. The Parties intend that all payments or property transfers made by the Interconnection Customer to the Participating TO for the installation of the Participating TO's Interconnection Facilities and the Network Upgrades shall be non-taxable, either as contributions to capital, or as a refundable advance, in accordance with the Internal Revenue Code and any applicable state income tax laws and shall not be taxable as contributions in aid of construction or otherwise under the Internal Revenue Code and any applicable state income tax laws.
- 5.17.2 Representations And Covenants. In accordance with IRS Notice 2001-82 and IRS Notice 88-129, the Interconnection Customer represents and covenants that (i) ownership of the electricity generated at the Large Generating Facility will pass to another party prior to the transmission of the electricity on the CAISO Controlled Grid, (ii) for income tax purposes, the amount of any payments and the cost of any property transferred to the Participating TO for the Participating TO's Interconnection Facilities will be capitalized by the Interconnection Customer as an intangible asset and recovered using the straight-line method over a useful life of twenty (20) years, and (iii) any portion of the Participating TO's Interconnection Facilities that is a "dual-use intertie," within the meaning of IRS Notice 88-129, is reasonably expected to carry only a de minimis amount of electricity in the direction of the Large Generating Facility. For this purpose, "de minimis amount" means no more than 5 percent of the total power flows in both directions, calculated in accordance with the "5 percent test" set forth in IRS Notice 88-129. This is not intended to be an exclusive list of the relevant conditions that must be met to conform to IRS requirements for non-taxable treatment.

At the Participating TO's request, the Interconnection Customer shall provide the Participating TO with a report from an independent engineer confirming its representation in clause (iii), above. The Participating TO represents and covenants that the cost of the Participating TO's Interconnection Facilities paid for by the Interconnection Customer without the possibility of refund or credit will have no net effect on the base upon which rates are determined.

5.17.3 Indemnification for the Cost Consequence of Current Tax Liability Imposed Upon the Participating TO. Notwithstanding Article 5.17.1, the Interconnection Customer shall protect, indemnify and hold harmless the Participating TO from the cost consequences of any current tax liability imposed against the Participating TO as the result of payments or property transfers made by the Interconnection Customer to the Participating TO under this LGIA for Interconnection Facilities, as well as any interest and penalties, other than interest and penalties attributable to any delay caused by the Participating TO.

The Participating TO shall not include a gross-up for the cost consequences of any current tax liability in the amounts it charges the Interconnection Customer under this LGIA unless (i) the Participating TO has determined, in good faith, that the payments or property transfers made by the Interconnection Customer to the Participating TO should be reported as income subject to taxation or (ii) any Governmental Authority directs the Participating TO to report payments or property as income subject to taxation; provided, however, that the Participating TO may require the Interconnection Customer to provide security for Interconnection Facilities, in a form reasonably acceptable to the Participating TO (such as a parental guarantee or a letter of credit), in an amount equal to the cost consequences of any current tax liability under this Article 5.17. The Interconnection Customer shall reimburse the Participating TO for such costs on a fully grossed-up basis, in accordance with Article 5.17.4, within thirty (30) Calendar Days of receiving written notification from the Participating TO of the amount due, including detail about how the amount was calculated.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten year testing period and the applicable statute of limitation, as it may be extended by the Participating TO upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event and the payment of any related indemnification obligations as contemplated by this Article 5.17.

5.17.4 Tax Gross-Up Amount. The Interconnection Customer's liability for the cost consequences of any current tax liability under this Article 5.17 shall be calculated on a fully grossed-up basis. Except as may otherwise be agreed to by the parties, this means that the Interconnection Customer will pay the Participating TO, in addition to the amount paid for the Interconnection Facilities and Network Upgrades, an amount equal to (1) the current taxes imposed on the Participating TO ("Current Taxes") on the excess of (a) the gross income realized by the Participating TO as a result of payments or property transfers made by the Interconnection Customer to the Participating TO under this LGIA (without regard to any payments under this Article 5.17) (the "Gross Income Amount") over (b) the present value of future tax deductions for depreciation that will be available as a result of such payments or property transfers (the "Present Value Depreciation Amount"), plus (2) an additional amount sufficient to permit the Participating TO to receive and retain, after the payment of all Current Taxes, an amount equal to the net amount described in clause (1).

For this purpose, (i) Current Taxes shall be computed based on the Participating TO's composite federal and state tax rates at the time the payments or property transfers are received and the Participating TO will be treated as being subject to tax at the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting the Participating TO's anticipated tax depreciation deductions as a result of such payments or property transfers by the Participating TO's current weighted average cost of capital. Thus, the formula for calculating the Interconnection Customer's liability to the Participating TO pursuant to this Article 5.17.4 can be expressed as follows: (Current Tax Rate x (Gross Income Amount – Present Value of Tax Depreciation))/(1-Current Tax Rate). Interconnection Customer's estimated tax liability in the event taxes are imposed shall be stated in Appendix A, Interconnection Facilities, Network Upgrades and Distribution Upgrades.

5.17.5 Private Letter Ruling or Change or Clarification of Law. At the Interconnection Customer's request and expense, the Participating TO shall file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by the Interconnection Customer to the Participating TO under this LGIA are subject to federal income taxation. The Interconnection Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of the Interconnection

Customer's knowledge. The Participating TO and Interconnection Customer shall cooperate in good faith with respect to the submission of such request, provided, however, the Interconnection Customer and the Participating TO explicitly acknowledge (and nothing herein is intended to alter) Participating TO's obligation under law to certify that the facts presented in the ruling request are true, correct and complete.

The Participating TO shall keep the Interconnection Customer fully informed of the status of such request for a private letter ruling and shall execute either a privacy act waiver or a limited power of attorney, in a form acceptable to the IRS, that authorizes the Interconnection Customer to participate in all discussions with the IRS regarding such request for a private letter ruling. The Participating TO shall allow the Interconnection Customer to attend all meetings with IRS officials about the request and shall permit the Interconnection Customer to prepare the initial drafts of any follow-up letters in connection with the request.

- 5.17.6 Subsequent Taxable Events. If, within 10 years from the date on which the relevant Participating TO's Interconnection Facilities are placed in service, (i) the Interconnection Customer Breaches the covenants contained in Article 5.17.2, (ii) a "disqualification event" occurs within the meaning of IRS Notice 88-129, or (iii) this LGIA terminates and the Participating TO retains ownership of the Interconnection Facilities and Network Upgrades, the Interconnection Customer shall pay a tax gross-up for the cost consequences of any current tax liability imposed on the Participating TO, calculated using the methodology described in Article 5.17.4 and in accordance with IRS Notice 90-60.
- **5.17.7 Contests.** In the event any Governmental Authority determines that the Participating TO's receipt of payments or property constitutes income that is subject to taxation, the Participating TO shall notify the Interconnection Customer, in writing, within thirty (30) Calendar Days of receiving notification of such determination by a Governmental Authority. Upon the timely written request by the Interconnection Customer and at the Interconnection Customer's sole expense, the Participating TO may appeal, protest, seek abatement of, or otherwise oppose such determination. Upon the Interconnection Customer's written request and sole expense, the Participating TO may file a claim for refund with respect to any taxes paid under this Article 5.17, whether or not it has received such a determination. The Participating TO reserve the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the selection of counsel and compromise or settlement of the claim, but the Participating TO shall keep the Interconnection Customer informed, shall consider in good faith suggestions from the Interconnection Customer about the conduct of the contest, and shall reasonably permit the Interconnection Customer or an Interconnection Customer representative to attend contest proceedings.

The Interconnection Customer shall pay to the Participating TO on a periodic basis, as invoiced by the Participating TO, the Participating TO's documented reasonable costs of prosecuting such appeal, protest, abatement or other contest, including any costs associated with obtaining the opinion of independent tax counsel described in this Article 5.17.7. The Participating TO may abandon any contest if the Interconnection Customer fails to provide payment to the Participating TO within thirty (30) Calendar Days of receiving such invoice.

At any time during the contest, the Participating TO may agree to a settlement either with the Interconnection Customer's consent or, if such consent is refused, after obtaining written advice from independent nationally-recognized tax counsel, selected by the Participating TO, but reasonably acceptable to the Interconnection Customer, that the proposed settlement represents a reasonable settlement given the hazards of litigation. The Interconnection Customer's obligation shall be based on the amount of the

settlement agreed to by the Interconnection Customer, or if a higher amount, so much of the settlement that is supported by the written advice from nationally-recognized tax counsel selected under the terms of the preceding paragraph. The settlement amount shall be calculated on a fully grossed-up basis to cover any related cost consequences of the current tax liability. The Participating TO may also settle any tax controversy without receiving the Interconnection Customer's consent or any such written advice; however, any such settlement will relieve the Interconnection Customer from any obligation to indemnify the Participating TO for the tax at issue in the contest (unless the failure to obtain written advice is attributable to the Interconnection Customer's unreasonable refusal to the appointment of independent tax counsel).

- 5.17.8 Refund. In the event that (a) a private letter ruling is issued to the Participating TO which holds that any amount paid or the value of any property transferred by the Interconnection Customer to the Participating TO under the terms of this LGIA is not subject to federal income taxation, (b) any legislative change or administrative announcement, notice, ruling or other determination makes it reasonably clear to the Participating TO in good faith that any amount paid or the value of any property transferred by the Interconnection Customer to the Participating TO under the terms of this LGIA is not taxable to the Participating TO, (c) any abatement, appeal, protest, or other contest results in a determination that any payments or transfers made by the Interconnection Customer to the Participating TO are not subject to federal income tax, or (d) if the Participating TO receives a refund from any taxing authority for any overpayment of tax attributable to any payment or property transfer made by the Interconnection Customer to the Participating TO pursuant to this LGIA, the Participating TO shall promptly refund to the Interconnection Customer the following:
 - (i) any payment made by Interconnection Customer under this Article 5.17 for taxes that is attributable to the amount determined to be non-taxable, together with interest thereon,
 - (ii) interest on any amounts paid by the Interconnection Customer to the Participating TO for such taxes which the Participating TO did not submit to the taxing authority, calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date payment was made by the Interconnection Customer to the date the Participating TO refunds such payment to the Interconnection Customer, and
 - (iii) with respect to any such taxes paid by the Participating TO, any refund or credit the Participating TO receives or to which it may be entitled from any Governmental Authority, interest (or that portion thereof attributable to the payment described in clause (i), above) owed to the Participating TO for such overpayment of taxes (including any reduction in interest otherwise payable by the Participating TO to any Governmental Authority resulting from an offset or credit); provided, however, that the Participating TO will remit such amount promptly to the Interconnection Customer only after and to the extent that the Participating TO has received a tax refund, credit or offset from any Governmental Authority for any applicable overpayment of income tax related to the Participating TO's Interconnection Facilities.

The intent of this provision is to leave the Parties, to the extent practicable, in the event that no taxes are due with respect to any payment for Interconnection Facilities and Network Upgrades hereunder, in the same position they would have been in had no such tax payments been made.

5.17.9 Taxes Other Than Income Taxes. Upon the timely request by the Interconnection Customer, and at the Interconnection Customer's sole expense, the CAISO or

Participating TO may appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against the CAISO or Participating TO for which the Interconnection Customer may be required to reimburse the CAISO or Participating TO under the terms of this LGIA. The Interconnection Customer shall pay to the Participating TO on a periodic basis, as invoiced by the Participating TO, the Participating TO's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. The Interconnection Customer, the CAISO, and the Participating TO shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by the Interconnection Customer to the CAISO or Participating TO for such taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, the Interconnection Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by the Participating TO.

Tax Status. Each Party shall cooperate with the others to maintain the other Parties' tax status. Nothing in this LGIA is intended to adversely affect the CAISO's or any Participating TO's tax exempt status with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds.

5.19 Modification.

5.19.1 General. The Interconnection Customer or the Participating TO may undertake modifications to its facilities, subject to the provisions of this LGIA and the CAISO Tariff. If a Party plans to undertake a modification that reasonably may be expected to affect the other Parties' facilities, that Party shall provide to the other Parties sufficient information regarding such modification so that the other Parties may evaluate the potential impact of such modification prior to commencement of the work. Such information shall be deemed to be confidential hereunder and shall include information concerning the timing of such modifications and whether such modifications are expected to interrupt the flow of electricity from the Large Generating Facility. The Party desiring to perform such work shall provide the relevant drawings, plans, and specifications to the other Parties at least ninety (90) Calendar Days in advance of the commencement of the work or such shorter period upon which the Parties may agree, which agreement shall not unreasonably be withheld, conditioned or delayed.

In the case of Large Generating Facility modifications that do not require the Interconnection Customer to submit an Interconnection Request, the CAISO or Participating TO shall provide, within thirty (30) Calendar Days (or such other time as the Parties may agree), an estimate of any additional modifications to the CAISO Controlled Grid, Participating TO's Interconnection Facilities, Network Upgrades or Distribution Upgrades necessitated by such Interconnection Customer modification and a good faith estimate of the costs thereof. The Participating TO and the CAISO shall determine if a Large Generating Facility modification is a Material Modification in accordance with the GIPLGIP.

- **5.19.2 Standards.** Any additions, modifications, or replacements made to a Party's facilities shall be designed, constructed and operated in accordance with this LGIA and Good Utility Practice.
- **5.19.3 Modification Costs.** The Interconnection Customer shall not be directly assigned the costs of any additions, modifications, or replacements that the Participating TO makes to the Participating TO's Interconnection Facilities or the Participating TO's Transmission System to facilitate the interconnection of a third party to the Participating TO's Interconnection Facilities or the Participating TO's Transmission System, or to provide

transmission service to a third party under the CAISO Tariff. The Interconnection Customer shall be responsible for the costs of any additions, modifications, or replacements to the Interconnection Facilities that may be necessary to maintain or upgrade such Interconnection Facilities consistent with Applicable Laws and Regulations, Applicable Reliability Standards or Good Utility Practice.

Article 6. Testing And Inspection

- Operation Date, the Participating TO shall test the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades and the Interconnection Customer shall test the Large Generating Facility and the Interconnection Customer's Interconnection Facilities to ensure their safe and reliable operation. Similar testing may be required after initial operation. Each Party shall make any modifications to its facilities that are found to be necessary as a result of such testing. The Interconnection Customer shall bear the cost of all such testing and modifications. The Interconnection Customer shall not commence initial parallel operation of an Electric Generating Unit with the Participating TO's Transmission System until the Participating TO provides prior written approval, which approval shall not be unreasonably withheld, for operation of such Electric Generating Unit. The Interconnection Customer shall generate test energy at the Large Generating Facility only if it has arranged for the delivery of such test energy.
- 6.2 Post-Commercial Operation Date Testing and Modifications. Each Party shall at its own expense perform routine inspection and testing of its facilities and equipment in accordance with Good Utility Practice as may be necessary to ensure the continued interconnection of the Large Generating Facility with the Participating TO's Transmission System in a safe and reliable manner. Each Party shall have the right, upon advance written notice, to require reasonable additional testing of the other Party's facilities, at the requesting Party's expense, as may be in accordance with Good Utility Practice.
- **Right to Observe Testing.** Each Party shall notify the other Parties at least fourteen (14) Calendar Days in advance of its performance of tests of its Interconnection Facilities or Generating Facility. The other Parties have the right, at their own expense, to observe such testing.
- Right to Inspect. Each Party shall have the right, but shall have no obligation to: (i) observe another Party's tests and/or inspection of any of its System Protection Facilities and other protective equipment, including Power System Stabilizers; (ii) review the settings of another Party's System Protection Facilities and other protective equipment; and (iii) review another Party's maintenance records relative to the Interconnection Facilities, the System Protection Facilities and other protective equipment. A Party may exercise these rights from time to time as it deems necessary upon reasonable notice to the other Party. The exercise or non-exercise by a Party of any such rights shall not be construed as an endorsement or confirmation of any element or condition of the Interconnection Facilities or the System Protection Facilities or other protective equipment or the operation thereof, or as a warranty as to the fitness, safety, desirability, or reliability of same. Any information that a Party obtains through the exercise of any of its rights under this Article 6.4 shall be deemed to be Confidential Information and treated pursuant to Article 22 of this LGIA.

Article 7. Metering

7.1 General. Each Party shall comply with any Applicable Reliability Standards and the Applicable Reliability Council requirements. The Interconnection Customer and CAISO shall comply with the provisions of the CAISO Tariff regarding metering, including Section 10 of the CAISO Tariff. Unless otherwise agreed by the Participating TO and the Interconnection Customer, the Participating TO may install additional Metering Equipment at the Point of Interconnection prior to any operation of any Electric Generating Unit and shall own, operate, test and maintain such Metering Equipment. Power flows to and from the Large Generating Facility shall be measured at

or, at the CAISO's or Participating TO's option for its respective Metering Equipment, compensated to, the Point of Interconnection. The CAISO shall provide metering quantities to the Interconnection Customer upon request in accordance with the CAISO Tariff by directly polling the CAISO's meter data acquisition system. The Interconnection Customer shall bear all reasonable documented costs associated with the purchase, installation, operation, testing and maintenance of the Metering Equipment.

- 7.2 Check Meters. The Interconnection Customer, at its option and expense, may install and operate, on its premises and on its side of the Point of Interconnection, one or more check meters to check the CAISO-polled meters or the Participating TO's meters. Such check meters shall be for check purposes only and shall not be used for the measurement of power flows for purposes of this LGIA, except in the case that no other means are available on a temporary basis at the option of the CAISO or the Participating TO. The check meters shall be subject at all reasonable times to inspection and examination by the CAISO or Participating TO or their designees. The installation, operation and maintenance thereof shall be performed entirely by the Interconnection Customer in accordance with Good Utility Practice.
- **7.3 Participating TO Retail Metering.** The Participating TO may install retail revenue quality meters and associated equipment, pursuant to the Participating TO's applicable retail tariffs.

Article 8. Communications

- 8.1 Interconnection Customer Obligations. The Interconnection Customer shall maintain satisfactory operating communications with the CAISO in accordance with the provisions of the CAISO Tariff and with the Participating TO's dispatcher or representative designated by the Participating TO. The Interconnection Customer shall provide standard voice line, dedicated voice line and facsimile communications at its Large Generating Facility control room or central dispatch facility through use of either the public telephone system, or a voice communications system that does not rely on the public telephone system. The Interconnection Customer shall also provide the dedicated data circuit(s) necessary to provide Interconnection Customer data to the CAISO and Participating TO as set forth in Appendix D, Security Arrangements Details. The data circuit(s) shall extend from the Large Generating Facility to the location(s) specified by the CAISO and Participating TO. Any required maintenance of such communications equipment shall be performed by the Interconnection Customer. Operational communications shall be activated and maintained under, but not be limited to, the following events: system paralleling or separation, scheduled and unscheduled shutdowns, equipment clearances, and hourly and daily load data.
- **8.2** Remote Terminal Unit. Prior to the Initial Synchronization Date of each Electric Generating Unit, a Remote Terminal Unit, or equivalent data collection and transfer equipment acceptable to the Parties, shall be installed by the Interconnection Customer, or by the Participating TO at the Interconnection Customer's expense, to gather accumulated and instantaneous data to be telemetered to the location(s) designated by the CAISO and by the Participating TO through use of a dedicated point-to-point data circuit(s) as indicated in Article 8.1.

Telemetry to the CAISO shall be provided in accordance with the CAISO's technical standards for direct telemetry. For telemetry to the Participating TO, the communication protocol for the data circuit(s) shall be specified by the Participating TO. Instantaneous bi-directional real power and reactive power flow and any other required information must be telemetered directly to the location(s) specified by the Participating TO.

Each Party will promptly advise the other Parties if it detects or otherwise learns of any metering, telemetry or communications equipment errors or malfunctions that require the attention and/or correction by another Party. The Party owning such equipment shall correct such error or malfunction as soon as reasonably feasible.

8.3 No Annexation. Any and all equipment placed on the premises of a Party shall be and remain the property of the Party providing such equipment regardless of the mode and manner of annexation or attachment to real property, unless otherwise mutually agreed by the Parties.

Article 9. Operations

- **9.1 General.** Each Party shall comply with Applicable Reliability Standards and the Applicable Reliability Council requirements. Each Party shall provide to the other Party all information that may reasonably be required by the other Party to comply with Applicable Laws and Regulations and Applicable Reliability Standards.
- 9.2 Balancing Authority Area Notification. At least three months before Initial Synchronization Date, the Interconnection Customer shall notify the CAISO and Participating TO in writing of the Balancing Authority Area in which the Large Generating Facility intends to be located. If the Interconnection Customer intends to locate the Large Generating Facility in a Balancing Authority Area other than the Balancing Authority Area within whose electrically metered boundaries the Large Generating Facility is located, and if permitted to do so by the relevant transmission tariffs, all necessary arrangements, including but not limited to those set forth in Article 7 and Article 8 of this LGIA, and remote Balancing Authority Area generator interchange agreements, if applicable, and the appropriate measures under such agreements, shall be executed and implemented prior to the placement of the Large Generating Facility in the other Balancing Authority Area.
- 9.3 CAISO and Participating TO Obligations. The CAISO and Participating TO shall cause the Participating TO's Transmission System to be operated and controlled in a safe and reliable manner and in accordance with this LGIA. The Participating TO at the Interconnection Customer's expense shall cause the Participating TO's Interconnection Facilities to be operated, maintained and controlled in a safe and reliable manner and in accordance with this LGIA. The CAISO and Participating TO may provide operating instructions to the Interconnection Customer consistent with this LGIA and Participating TO and CAISO operating protocols and procedures as they may change from time to time. The Participating TO and CAISO will consider changes to their operating protocols and procedures proposed by the Interconnection Customer.
- 9.4 Interconnection Customer Obligations. The Interconnection Customer shall at its own expense operate, maintain and control the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA. The Interconnection Customer shall operate the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in accordance with all applicable requirements of the Balancing Authority Area of which it is part, including such requirements as set forth in Appendix C, Interconnection Details, of this LGIA. Appendix C, Interconnection Details, will be modified to reflect changes to the requirements as they may change from time to time. A Party may request that another Party provide copies of the requirements set forth in Appendix C, Interconnection Details, of this LGIA. The Interconnection Customer shall not commence Commercial Operation of an Electric Generating Unit with the Participating TO's Transmission System until the Participating TO provides prior written approval, which approval shall not be unreasonably withheld, for operation of such Electric Generating Unit.
- **9.5 Start-Up and Synchronization.** Consistent with the Parties' mutually acceptable procedures, the Interconnection Customer is responsible for the proper synchronization of each Electric Generating Unit to the CAISO Controlled Grid.

9.6 Reactive Power.

9.6.1 Power Factor Design Criteria. The Interconnection Customer shall design the Large Generating Facility to maintain a composite power delivery at continuous rated power output at the terminals of the Electric Generating Unit at a power factor within the range of 0.95 leading to 0.90 lagging, unless the CAISO has established different requirements

that apply to all generators in the Balancing Authority Area on a comparable basis. Power factor design criteria for wind generators are provided in Appendix H of this LGIA.

- 9.6.2 Voltage Schedules. Once the Interconnection Customer has synchronized an Electric Generating Unit with the CAISO Controlled Grid, the CAISO or Participating TO shall require the Interconnection Customer to maintain a voltage schedule by operating the Electric Generating Unit to produce or absorb reactive power within the design limitations of the Electric Generating Unit set forth in Article 9.6.1 (Power Factor Design Criteria). CAISO's voltage schedules shall treat all sources of reactive power in the Balancing Authority Area in an equitable and not unduly discriminatory manner. The Participating TO shall exercise Reasonable Efforts to provide the Interconnection Customer with such schedules at least one (1) day in advance, and the CAISO or Participating TO may make changes to such schedules as necessary to maintain the reliability of the CAISO Controlled Grid or the Participating TO's electric system. The Interconnection Customer shall operate the Electric Generating Unit to maintain the specified output voltage or power factor within the design limitations of the Electric Generating Unit set forth in Article 9.6.1 (Power Factor Design Criteria), and as may be required by the CAISO to operate the Electric Generating Unit at a specific voltage schedule within the design limitations set forth in Article 9.6.1. If the Interconnection Customer is unable to maintain the specified voltage or power factor, it shall promptly notify the CAISO and the Participating
 - 9.6.2.1 Governors and Regulators. Whenever an Electric Generating Unit is operated in parallel with the CAISO Controlled Grid and the speed governors (if installed on the Electric Generating Unit pursuant to Good Utility Practice) and voltage regulators are capable of operation, the Interconnection Customer shall operate the Electric Generating Unit with its speed governors and voltage regulators in automatic operation. If the Electric Generating Unit's speed governors and voltage regulators are not capable of such automatic operation, the Interconnection Customer shall immediately notify the CAISO and the Participating TO and ensure that the Electric Generating Unit operates as specified in Article 9.6.2 through manual operation and that such Electric Generating Unit's reactive power production or absorption (measured in MVARs) are within the design capability of the Electric Generating Unit(s) and steady state stability limits. The Interconnection Customer shall restore the speed governors and voltage regulators to automatic operation as soon as possible. If the Large Generating Facility's speed governors and voltage regulators are improperly tuned or malfunctioning, the CAISO shall have the right to order the reduction in output or disconnection of the Large Generating Facility if the reliability of the CAISO Controlled Grid would be adversely affected. The Interconnection Customer shall not cause its Large Generating Facility to disconnect automatically or instantaneously from the CAISO Controlled Grid or trip any Electric Generating Unit comprising the Large Generating Facility for an under or over frequency condition unless the abnormal frequency condition persists for a time period beyond the limits set forth in ANSI/IEEE Standard C37.106, or such other standard as applied to other generators in the Balancing Authority Area on a comparable basis.
- 9.6.3 Payment for Reactive Power. CAISO is required to pay the Interconnection Customer for reactive power that Interconnection Customer provides or absorbs from an Electric Generating Unit when the CAISO requests the Interconnection Customer to operate its Electric Generating Unit outside the range specified in Article 9.6.1, provided that if the CAISO pays other generators for reactive power service within the specified range, it must also pay the Interconnection Customer. Payments shall be pursuant to Article 11.6 or such other agreement to which the CAISO and Interconnection Customer have otherwise agreed.

9.7 Outages and Interruptions.

9.7.1 **Outages.**

- 9.7.1.1 Outage Authority and Coordination. Each Party may in accordance with Good Utility Practice in coordination with the other Parties remove from service any of its respective Interconnection Facilities or Network Upgrades that may impact another Party's facilities as necessary to perform maintenance or testing or to install or replace equipment. Absent an Emergency Condition, the Party scheduling a removal of such facility(ies) from service will use Reasonable Efforts to schedule such removal on a date and time mutually acceptable to all Parties. In all circumstances any Party planning to remove such facility(ies) from service shall use Reasonable Efforts to minimize the effect on the other Parties of such removal.
- 9.7.1.2 Outage Schedules. The CAISO shall post scheduled outages of CAISO Controlled Grid facilities in accordance with the provisions of the CAISO Tariff. The Interconnection Customer shall submit its planned maintenance schedules for the Large Generating Facility to the CAISO in accordance with the CAISO Tariff. The Interconnection Customer shall update its planned maintenance schedules in accordance with the CAISO Tariff. The CAISO may request the Interconnection Customer to reschedule its maintenance as necessary to maintain the reliability of the CAISO Controlled Grid in accordance with the CAISO Tariff. Such planned maintenance schedules and updates and changes to such schedules shall be provided by the Interconnection Customer to the Participating TO concurrently with their submittal to the CAISO. The CAISO shall compensate the Interconnection Customer for any additional direct costs that the Interconnection Customer incurs as a result of having to reschedule maintenance in accordance with the CAISO Tariff. The Interconnection Customer will not be eligible to receive compensation, if during the twelve (12) months prior to the date of the scheduled maintenance, the Interconnection Customer had modified its schedule of maintenance activities.
- 9.7.1.3 Outage Restoration. If an outage on a Party's Interconnection Facilities or Network Upgrades adversely affects another Party's operations or facilities, the Party that owns or controls the facility that is out of service shall use Reasonable Efforts to promptly restore such facility(ies) to a normal operating condition consistent with the nature of the outage. The Party that owns or controls the facility that is out of service shall provide the other Parties, to the extent such information is known, information on the nature of the Emergency Condition, if the outage is caused by an Emergency Condition, an estimated time of restoration, and any corrective actions required. Initial verbal notice shall be followed up as soon as practicable with written notice explaining the nature of the outage, if requested by a Party, which may be provided by e-mail or facsimile.
- 9.7.2 Interruption of Service. If required by Good Utility Practice to do so, the CAISO or the Participating TO may require the Interconnection Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect the CAISO's or the Participating TO's ability to perform such activities as are necessary to safely and reliably operate and maintain the Participating TO's electric system or the CAISO Controlled Grid. The following provisions shall apply to any interruption or reduction permitted under this Article 9.7.2:
 - **9.7.2.1** The interruption or reduction shall continue only for so long as reasonably necessary under Good Utility Practice;

- 9.7.2.2 Any such interruption or reduction shall be made on an equitable, non-discriminatory basis with respect to all generating facilities directly connected to the CAISO Controlled Grid, subject to any conditions specified in this LGIA;
- 9.7.2.3 When the interruption or reduction must be made under circumstances which do not allow for advance notice, the CAISO or Participating TO, as applicable, shall notify the Interconnection Customer by telephone as soon as practicable of the reasons for the curtailment, interruption, or reduction, and, if known, its expected duration. Telephone notification shall be followed by written notification, if requested by the Interconnection Customer, as soon as practicable;
- 9.7.2.4 Except during the existence of an Emergency Condition, the CAISO or Participating TO shall notify the Interconnection Customer in advance regarding the timing of such interruption or reduction and further notify the Interconnection Customer of the expected duration. The CAISO or Participating TO shall coordinate with the Interconnection Customer using Good Utility Practice to schedule the interruption or reduction during periods of least impact to the Interconnection Customer, the CAISO, and the Participating TO;
- 9.7.2.5 The Parties shall cooperate and coordinate with each other to the extent necessary in order to restore the Large Generating Facility, Interconnection Facilities, the Participating TO's Transmission System, and the CAISO Controlled Grid to their normal operating state, consistent with system conditions and Good Utility Practice.
- 9.7.3 Under-Frequency and Over Frequency Conditions. The CAISO Controlled Grid is designed to automatically activate a load-shed program as required by Applicable Reliability Standards and the Applicable Reliability Council in the event of an under-frequency system disturbance. The Interconnection Customer shall implement under-frequency and over-frequency protection set points for the Large Generating Facility as required by Applicable Reliability Standards and the Applicable Reliability Council to ensure "ride through" capability. Large Generating Facility response to frequency deviations of pre-determined magnitudes, both under-frequency and over-frequency deviations, shall be studied and coordinated with the Participating TO and CAISO in accordance with Good Utility Practice. The term "ride through" as used herein shall mean the ability of a Generating Facility to stay connected to and synchronized with the CAISO Controlled Grid during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice.

9.7.4 System Protection and Other Control Requirements.

- 9.7.4.1 System Protection Facilities. The Interconnection Customer shall, at its expense, install, operate and maintain System Protection Facilities as a part of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. The Participating TO shall install at the Interconnection Customer's expense any System Protection Facilities that may be required on the Participating TO's Interconnection Facilities or the Participating TO's Transmission System as a result of the interconnection of the Large Generating Facility and the Interconnection Customer's Interconnection Facilities.
- 9.7.4.2 The Participating TO's and Interconnection Customer's protection facilities shall be designed and coordinated with other systems in accordance with Applicable Reliability Standards, Applicable Reliability Council criteria, and Good Utility Practice.

- **9.7.4.3** The Participating TO and Interconnection Customer shall each be responsible for protection of its facilities consistent with Good Utility Practice.
- 9.7.4.4 The Participating TO's and Interconnection Customer's protective relay design shall incorporate the necessary test switches to perform the tests required in Article 6. The required test switches will be placed such that they allow operation of lockout relays while preventing breaker failure schemes from operating and causing unnecessary breaker operations and/or the tripping of the Interconnection Customer's Electric Generating Units.
- 9.7.4.5 The Participating TO and Interconnection Customer will test, operate and maintain System Protection Facilities in accordance with Good Utility Practice and, if applicable, the requirements of the Participating TO's Interconnection Handbook.
- 9.7.4.6 Prior to the in-service date, and again prior to the Commercial Operation Date, the Participating TO and Interconnection Customer or their agents shall perform a complete calibration test and functional trip test of the System Protection Facilities. At intervals suggested by Good Utility Practice, the standards and procedures of the Participating TO, including, if applicable, the requirements of the Participating TO's Interconnection Handbook, and following any apparent malfunction of the System Protection Facilities, each Party shall perform both calibration and functional trip tests of its System Protection Facilities. These tests do not require the tripping of any in-service generation unit. These tests do, however, require that all protective relays and lockout contacts be activated.
- 9.7.5 Requirements for Protection. In compliance with Good Utility Practice and, if applicable, the requirements of the Participating TO's Interconnection Handbook, the Interconnection Customer shall provide, install, own, and maintain relays, circuit breakers and all other devices necessary to remove any fault contribution of the Large Generating Facility to any short circuit occurring on the Participating TO's Transmission System not otherwise isolated by the Participating TO's equipment, such that the removal of the fault contribution shall be coordinated with the protective requirements of the Participating TO's Transmission System. Such protective equipment shall include, without limitation, a disconnecting device with fault current-interrupting capability located between the Large Generating Facility and the Participating TO's Transmission System at a site selected upon mutual agreement (not to be unreasonably withheld, conditioned or delayed) of the Parties. The Interconnection Customer shall be responsible for protection of the Large Generating Facility and the Interconnection Customer's other equipment from such conditions as negative sequence currents, over- or under-frequency, sudden load rejection, over- or under-voltage, and generator loss-of-field. The Interconnection Customer shall be solely responsible to disconnect the Large Generating Facility and the Interconnection Customer's other equipment if conditions on the CAISO Controlled Grid could adversely affect the Large Generating Facility.
- 9.7.6 Power Quality. Neither the Participating TO's nor the Interconnection Customer's facilities shall cause excessive voltage flicker nor introduce excessive distortion to the sinusoidal voltage or current waves as defined by ANSI Standard C84.1-1989, in accordance with IEEE Standard 519, any applicable superseding electric industry standard, or any alternative Applicable Reliability Standard or Applicable Reliability Council standard. In the event of a conflict among ANSI Standard C84.1-1989, any applicable superseding electric industry standard, or any alternative Applicable Reliability Standard or Applicable Reliability Council standard, the alternative Applicable Reliability Standard or Applicable Reliability Council standard shall control.

- 9.8 Switching and Tagging Rules. Each Party shall provide the other Parties a copy of its switching and tagging rules that are applicable to the other Parties' activities. Such switching and tagging rules shall be developed on a non-discriminatory basis. The Parties shall comply with applicable switching and tagging rules, as amended from time to time, in obtaining clearances for work or for switching operations on equipment.
- 9.9 Use of Interconnection Facilities by Third Parties.
 - **9.9.1 Purpose of Interconnection Facilities.** Except as may be required by Applicable Laws and Regulations, or as otherwise agreed to among the Parties, the Interconnection Facilities shall be constructed for the sole purpose of interconnecting the Large Generating Facility to the Participating TO's Transmission System and shall be used for no other purpose.
 - 9.9.2 Third Party Users. If required by Applicable Laws and Regulations or if the Parties mutually agree, such agreement not to be unreasonably withheld, to allow one or more third parties to use the Participating TO's Interconnection Facilities, or any part thereof. the Interconnection Customer will be entitled to compensation for the capital expenses it incurred in connection with the Interconnection Facilities based upon the pro rata use of the Interconnection Facilities by the Participating TO, all third party users, and the Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually-agreed upon methodology. In addition, cost responsibility for ongoing costs, including operation and maintenance costs associated with the Interconnection Facilities, will be allocated between the Interconnection Customer and any third party users based upon the pro rata use of the Interconnection Facilities by the Participating TO, all third party users, and the Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually agreed upon methodology. If the issue of such compensation or allocation cannot be resolved through such negotiations, it shall be submitted to FERC for resolution.
- **9.10 Disturbance Analysis Data Exchange.** The Parties will cooperate with one another in the analysis of disturbances to either the Large Generating Facility or the CAISO Controlled Grid by gathering and providing access to any information relating to any disturbance, including information from oscillography, protective relay targets, breaker operations and sequence of events records, and any disturbance information required by Good Utility Practice.

Article 10. Maintenance

- **10.1 Participating TO Obligations.** The Participating TO shall maintain the Participating TO's Transmission System and the Participating TO's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA.
- **10.2** Interconnection Customer Obligations. The Interconnection Customer shall maintain the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA.
- **10.3 Coordination.** The Parties shall confer regularly to coordinate the planning, scheduling and performance of preventive and corrective maintenance on the Large Generating Facility and the Interconnection Facilities.
- 10.4 Secondary Systems. The Participating TO and Interconnection Customer shall cooperate with the other Parties in the inspection, maintenance, and testing of control or power circuits that operate below 600 volts, AC or DC, including, but not limited to, any hardware, control or protective devices, cables, conductors, electric raceways, secondary equipment panels, transducers, batteries, chargers, and voltage and current transformers that directly affect the operation of a Party's facilities and equipment which may reasonably be expected to impact the other Parties. Each Party shall provide advance notice to the other Parties before undertaking

- any work on such circuits, especially on electrical circuits involving circuit breaker trip and close contacts, current transformers, or potential transformers.
- 10.5 Operating and Maintenance Expenses. Subject to the provisions herein addressing the use of facilities by others, and except for operations and maintenance expenses associated with modifications made for providing interconnection or transmission service to a third party and such third party pays for such expenses, the Interconnection Customer shall be responsible for all reasonable expenses including overheads, associated with: (1) owning, operating, maintaining, repairing, and replacing the Interconnection Customer's Interconnection Facilities; and (2) operation, maintenance, repair and replacement of the Participating TO's Interconnection Facilities.

Article 11. Performance Obligation

- 11.1 Interconnection Customer's Interconnection Facilities. The Interconnection Customer shall design, procure, construct, install, own and/or control the Interconnection Customer's Interconnection Facilities described in Appendix A at its sole expense.
- 11.2 Participating TO's Interconnection Facilities. The Participating TO shall design, procure, construct, install, own and/or control the Participating TO's Interconnection Facilities described in Appendix A at the sole expense of the Interconnection Customer. Unless the Participating TO elects to fund the capital for the Participating TO's Interconnection Facilities, they shall be solely funded by the Interconnection Customer.
- 11.3 Network Upgrades and Distribution Upgrades. The Participating TO shall design, procure, construct, install, and own the Network Upgrades and Distribution Upgrades described in Appendix A. The Interconnection Customer shall be responsible for all costs related to Distribution Upgrades. Unless the Participating TO elects to fund the capital for the Distribution Upgrades and Network Upgrades, they shall be funded by the Interconnection Customer, which, for Interconnection Customers processed under the Section 6 of the GIP (in queue clusters), shall be in an amount determined pursuant to the methodology set forth in Section 6.5 13 of the GIPLGIP. This specific amount is set forth in Appendix G to this LGIA.
- 11.4 Transmission Credits. No later than thirty (30) Calendar Days prior to the Commercial Operation Date, the Interconnection Customer may make a one-time election by written notice to the CAISO and the Participating TO to receive Congestion Revenue Rights as defined in and as available under the CAISO Tariff at the time of the election in accordance with the CAISO Tariff, in lieu of a refund of the cost of Network Upgrades in accordance with Article 11.4.1.
 - 11.4.1 Repayment of Amounts Advanced for Network Upgrades. Upon the Commercial Operation Date, the Interconnection Customer shall be entitled to a repayment, equal to the total amount paid to the Participating TO for the costs of Network Upgrades for which it is responsible, as set forth in Appendix G. Such amount shall include any tax gross-up or other tax-related payments associated with Network Upgrades not refunded to the Interconnection Customer pursuant to Article 5.17.8 or otherwise, and shall be paid to the Interconnection Customer by the Participating TO on a dollar-for-dollar basis either through (1) direct payments made on a levelized basis over the five-year period commencing on the Commercial Operation Date; or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years from the Commercial Operation Date. Notwithstanding the foregoing, if this LGIA terminates within five (5) years from the Commercial Operation Date, the Participating TO's obligation to pay refunds to the Interconnection Customer shall cease as of the date of termination. Any repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment

of such payment. Interest shall continue to accrue on the repayment obligation so long as this LGIA is in effect. The Interconnection Customer may assign such repayment rights to any person.

If the Large Generating Facility fails to achieve Commercial Operation, but it or another Generating Facility is later constructed and makes use of the Network Upgrades, the Participating TO shall at that time reimburse Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the Generating Facility, if different, is responsible for identifying and demonstrating to the Participating TO the appropriate entity to which reimbursement must be made in order to implement the intent of this reimbursement obligation.

- 11.4.2 Special Provisions for Affected Systems. The Interconnection Customer shall enter into an agreement with the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid, as applicable, in accordance with the GIPLGIP. Such agreement shall specify the terms governing payments to be made by the Interconnection Customer to the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid as well as the repayment by the owner of the Affected System and/or other affected owners of portions of the CAISO Controlled Grid. In no event shall the Participating TO be responsible for the repayment for any facilities that are not part of the Participating TO's Transmission System. In the event the Participating TO is a joint owner with an Affected System or with any other co-owner of a facility affected by the Large Generating Facility, the Participating TO's obligation to reimburse the Interconnection Customer for payments made to address the impacts of the Large Generating Facility on the system shall not exceed the proportionate amount of the cost of any upgrades attributable to the proportion of the jointly-owned facility owned by the Participating TO.
- 11.4.3 Notwithstanding any other provision of this LGIA, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, Congestion Revenue Rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades, including the right to obtain cash reimbursements, merchant transmission Congestion Revenue Rights in accordance with Section 36.11 of the CAISO Tariff, or transmission credits for transmission service that is not associated with the Large Generating Facility.
- Provision of Interconnection Financial Security. The Interconnection Customer is obligated to provide all necessary Interconnection Financial Security required under Section 9 of the GIPLGIP in a manner acceptable under Section 9 of the GIPLGIP. Failure by the Interconnection Customer to timely satisfy the GIP'sLGIP's requirements for the provision of Interconnection Financial Security shall beresult in the Interconnection Request being deemed a breach of this Agreement withdrawn and a condition of Default of this Agreement. subject to LGIP Section 3.8.
 - 11.5.1 Notwithstanding any other provision in this Agreement for notice of Default and opportunity to cure such Default, the CAISO or the Participating TO shall provide Interconnection Customer with written notice of any Default due to timely failure to post Financial Security, and the Interconnection Customer shall have five (5) Business Days from the date of such notice to cure such Default by posting the required Financial Security. If the Interconnection Customer fails to cure the Default, then this Agreement shall be deemed terminated.
- **11.6** Interconnection Customer Compensation. If the CAISO requests or directs the Interconnection Customer to provide a service pursuant to Articles 9.6.3 (Payment for Reactive

Power) or 13.5.1 of this LGIA, the CAISO shall compensate the Interconnection Customer in accordance with the CAISO Tariff.

11.6.1 Interconnection Customer Compensation for Actions During Emergency Condition. The CAISO shall compensate the Interconnection Customer in accordance with the CAISO Tariff for its provision of real and reactive power and other Emergency Condition services that the Interconnection Customer provides to support the CAISO Controlled Grid during an Emergency Condition in accordance with Article 11.6.

Article 12. Invoice

- 12.1 General. The Participating TO shall submit to the Interconnection Customer, on a monthly basis, invoices of amounts due pursuant to this LGIA for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party under this LGIA, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party. Notwithstanding the foregoing, any invoices between the CAISO and another Party shall be submitted and paid in accordance with the CAISO Tariff.
- 12.2 Final Invoice. As soon as reasonably practicable, but within twelve months after completion of the construction of the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, the Participating TO shall provide an invoice of the final cost of the construction of the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, and shall set forth such costs in sufficient detail to enable the Interconnection Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates. With respect to costs associated with the Participating TO's Interconnection Facilities and Distribution Upgrades, the Participating TO shall refund to the Interconnection Customer any amount by which the actual payment by the Interconnection Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice; or, in the event the actual costs of construction exceed the Interconnection Customer's actual payment for estimated costs, then the Interconnection Customer shall pay to the Participating TO any amount by which the actual costs of construction exceed the actual payment by the Interconnection Customer for estimated costs within thirty (30) Calendar Days of the issuance of such final construction invoice. With respect to costs associated with Network Upgrades, the Participating TO shall refund to the Interconnection Customer any amount by which the actual payment by the Interconnection Customer for estimated costs exceeds the actual costs of construction multiplied by the Interconnection Customer's percentage share of those costs, as set forth in Appendix G to this LGIA within thirty (30) Calendar Days of the issuance of such final construction invoice. In the event the actual costs of construction multiplied by the Interconnection Customer's percentage share of those costs exceed the Interconnection Customer's actual payment for estimated costs, then the Participating TO shall recover such difference through its transmission service rates.
- 12.3 Payment. Invoices shall be rendered to the Interconnection Customer at the address specified in Appendix F. The Interconnection Customer shall pay, or Participating TO shall refund, the amounts due within thirty (30) Calendar Days of the Interconnection Customer's receipt of the invoice. All payments shall be made in immediately available funds payable to the Interconnection Customer or Participating TO, or by wire transfer to a bank named and account designated by the invoicing Interconnection Customer or Participating TO. Payment of invoices by any Party will not constitute a waiver of any rights or claims any Party may have under this LGIA.
- **12.4 Disputes.** In the event of a billing dispute between the Interconnection Customer and the Participating TO, the Participating TO and the CAISO shall continue to provide Interconnection Service under this LGIA as long as the Interconnection Customer: (i) continues to make all

payments not in dispute; and (ii) pays to the Participating TO or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If the Interconnection Customer fails to meet these two requirements for continuation of service, then the Participating TO may provide notice to the Interconnection Customer of a Default pursuant to Article 17. Within thirty (30) Calendar Days after the resolution of the dispute, the Party that owes money to the other Party shall pay the amount due with interest calculated in accordance with the methodology set forth in FERC's Regulations at 18 C.F.R. § 35.19a(a)(2)(iii). Notwithstanding the foregoing, any billing dispute between the CAISO and another Party shall be resolved in accordance with the provisions of Article 27 of this LGIA.

Article 13. Emergencies

- 13.1 [Reserved]
- **13.2 Obligations.** Each Party shall comply with the Emergency Condition procedures of the CAISO, NERC, the Applicable Reliability Council, Applicable Reliability Standards, Applicable Laws and Regulations, and any emergency procedures set forth in this LGIA.
- 13.3 **Notice.** The Participating TO or the CAISO shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that affects the Participating TO's Interconnection Facilities or Distribution System or the CAISO Controlled Grid, respectively, that may reasonably be expected to affect the Interconnection Customer's operation of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. The Interconnection Customer shall notify the Participating TO and the CAISO promptly when it becomes aware of an Emergency Condition that affects the Large Generating Facility or the Interconnection Customer's Interconnection Facilities that may reasonably be expected to affect the CAISO Controlled Grid or the Participating TO's Interconnection Facilities. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of the Interconnection Customer's or Participating TO's facilities and operations, its anticipated duration and the corrective action taken and/or to be taken. The initial notice shall be followed as soon as practicable with written notice, if requested by a Party, which may be provided by electronic mail or facsimile, or in the case of the CAISO may be publicly posted on the CAISO's internet web site.
- **13.4 Immediate Action.** Unless, in the Interconnection Customer's reasonable judgment, immediate action is required, the Interconnection Customer shall obtain the consent of the CAISO and the Participating TO, such consent to not be unreasonably withheld, prior to performing any manual switching operations at the Large Generating Facility or the Interconnection Customer's Interconnection Facilities in response to an Emergency Condition declared by the Participating TO or CAISO or in response to any other emergency condition.

13.5 CAISO and Participating TO Authority.

13.5.1 General. The CAISO and Participating TO may take whatever actions or inactions, including issuance of dispatch instructions, with regard to the CAISO Controlled Grid or the Participating TO's Interconnection Facilities or Distribution System they deem necessary during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the CAISO Controlled Grid or the Participating TO's Interconnection Facilities or Distribution System, and (iii) limit or prevent damage, and (iv) expedite restoration of service.

The Participating TO and the CAISO shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. The Participating TO or the CAISO may, on the basis of technical considerations, require the Large Generating Facility to mitigate an Emergency Condition by taking actions necessary and limited in scope to remedy the Emergency Condition, including, but not limited to, directing the Interconnection

Customer to shut-down, start-up, increase or decrease the real or reactive power output of the Large Generating Facility; implementing a reduction or disconnection pursuant to Article 13.5.2; directing the Interconnection Customer to assist with black start (if available) or restoration efforts; or altering the outage schedules of the Large Generating Facility and the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall comply with all of the CAISO's and Participating TO's operating instructions concerning Large Generating Facility real power and reactive power output within the manufacturer's design limitations of the Large Generating Facility's equipment that is in service and physically available for operation at the time, in compliance with Applicable Laws and Regulations.

- 13.5.2 Reduction and Disconnection. The Participating TO or the CAISO may reduce Interconnection Service or disconnect the Large Generating Facility or the Interconnection Customer's Interconnection Facilities when such reduction or disconnection is necessary under Good Utility Practice due to Emergency Conditions. These rights are separate and distinct from any right of curtailment of the CAISO pursuant to the CAISO Tariff. When the CAISO or Participating TO can schedule the reduction or disconnection in advance, the CAISO or Participating TO shall notify the Interconnection Customer of the reasons, timing and expected duration of the reduction or disconnection. The CAISO or Participating TO shall coordinate with the Interconnection Customer using Good Utility Practice to schedule the reduction or disconnection during periods of least impact to the Interconnection Customer and the CAISO and Participating TO. Any reduction or disconnection shall continue only for so long as reasonably necessary under Good Utility Practice. The Parties shall cooperate with each other to restore the Large Generating Facility, the Interconnection Facilities, and the CAISO Controlled Grid to their normal operating state as soon as practicable consistent with Good Utility Practice.
- 13.6 Interconnection Customer Authority. Consistent with Good Utility Practice, this LGIA, and the CAISO Tariff, the Interconnection Customer may take actions or inactions with regard to the Large Generating Facility or the Interconnection Customer's Interconnection Facilities during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service. Interconnection Customer shall use Reasonable Efforts to minimize the effect of such actions or inactions on the CAISO Controlled Grid and the Participating TO's Interconnection Facilities. The CAISO and Participating TO shall use Reasonable Efforts to assist Interconnection Customer in such actions.
- **13.7 Limited Liability.** Except as otherwise provided in Article 11.6.1 of this LGIA, no Party shall be liable to any other Party for any action it takes in responding to an Emergency Condition so long as such action is made in good faith and is consistent with Good Utility Practice.

Article 14. Regulatory Requirements And Governing Law

14.1 Regulatory Requirements. Each Party's obligations under this LGIA shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the applying Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek and use its Reasonable Efforts to obtain such other approvals. Nothing in this LGIA shall require the Interconnection Customer to take any action that could result in its inability to obtain, or its loss of, status or exemption under the Federal Power Act or the Public Utility Holding Company Act of 1935, as amended, or the Public Utility Regulatory Policies Act of 1978. or the Energy Policy Act of 2005.

14.2 Governing Law.

- **14.2.1** The validity, interpretation and performance of this LGIA and each of its provisions shall be governed by the laws of the state where the Point of Interconnection is located, without regard to its conflicts of law principles.
- **14.2.2** This LGIA is subject to all Applicable Laws and Regulations.
- **14.2.3** Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, rules, or regulations of a Governmental Authority.

Article 15. Notices

General. Unless otherwise provided in this LGIA, any notice, demand or request required or permitted to be given by a Party to another and any instrument required or permitted to be tendered or delivered by a Party in writing to another shall be effective when delivered and may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered mail, addressed to the Party, or personally delivered to the Party, at the address set out in Appendix F, Addresses for Delivery of Notices and Billings.

A Party must update the information in Appendix F as information changes. A Party may change the notice information in this LGIA by giving five (5) Business Days written notice prior to the effective date of the change. Such changes shall not constitute an amendment to this LGIA.

- **15.2 Billings and Payments.** Billings and payments shall be sent to the addresses set out in Appendix F.
- **15.3 Alternative Forms of Notice.** Any notice or request required or permitted to be given by a Party to another and not required by this LGIA to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out in Appendix F.
- **Operations and Maintenance Notice.** Each Party shall notify the other Parties in writing of the identity of the person(s) that it designates as the point(s) of contact with respect to the implementation of Articles 9 and 10.

Article 16. Force Majeure

- 16.1 Force Majeure.
 - **16.1.1** Economic hardship is not considered a Force Majeure event.
 - 16.1.2 No Party shall be considered to be in Default with respect to any obligation hereunder, (including obligations under Article 4), other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other Party in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this Article shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall exercise due diligence to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

Article 17. Default

17.1 Default.

- 17.1.1 General. No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this LGIA or the result of an act or omission of the other Party. Upon a Breach, the affected non-Breaching Party(ies) shall give written notice of such Breach to the Breaching Party. Except as provided in Article 17.1.2, and in Article 11.5.1, the Breaching Party shall have thirty (30) Calendar Days from receipt of the Default notice within which to cure such Breach; provided however, if such Breach is not capable of cure within thirty (30) Calendar Days, the Breaching Party shall commence such cure within thirty (30) Calendar Days after notice and continuously and diligently complete such cure within ninety (90) Calendar Days from receipt of the Default notice; and, if cured within such time, the Breach specified in such notice shall cease to exist.
- 17.1.2 Right to Terminate. If a Breach is not cured as provided in this Article, or if a Breach is not capable of being cured within the period provided for herein, the affected non-Breaching Party(ies) shall have the right to declare a Default and terminate this LGIA by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not such Party(ies) terminates this LGIA, to recover from the Breaching Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this Article will survive termination of this LGIA.

Article 18. Indemnity, Consequential Damages And Insurance

- **18.1 Indemnity.** Each Party shall at all times indemnify, defend, and hold the other Parties harmless from, any and all Losses arising out of or resulting from another Party's action or inactions of its obligations under this LGIA on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the Indemnified Party.
 - **18.1.1** Indemnified Party. If an Indemnified Party is entitled to indemnification under this Article 18 as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 18.1, to assume the defense of such claim, such Indemnified Party may at the expense of the Indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.
 - **18.1.2 Indemnifying Party.** If an Indemnifying Party is obligated to indemnify and hold any Indemnified Party harmless under this Article 18, the amount owing to the Indemnified Party shall be the amount of such Indemnified Party's actual Loss, net of any insurance or other recovery.
 - **18.1.3** Indemnity Procedures. Promptly after receipt by an Indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 18.1 may apply, the Indemnified Party shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Party. If the defendants in any such action include one or more Indemnified Parties and the Indemnifying Party and if the Indemnified Party reasonably concludes that there may be legal defenses available to it and/or other Indemnified Parties which are different from or additional to those available to the Indemnifying Party, the Indemnified Party shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional

attorney to represent an Indemnified Party or Indemnified Parties having such differing or additional legal defenses.

The Indemnified Party shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Party and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Party, or there exists a conflict or adversity of interest between the Indemnified Party and the Indemnifying Party, in such event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Party, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Party, which shall not be unreasonably withheld, conditioned or delayed.

- 18.2 Consequential Damages. Other than the liquidated damages heretofore described in Article 5.3, in no event shall any Party be liable under any provision of this LGIA for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to another Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.
- **18.3 Insurance.** Each Party shall, at its own expense, maintain in force throughout the period of this LGIA, and until released by the other Parties, the following minimum insurance coverages, with insurers rated no less than A- (with a minimum size rating of VII) by Bests' Insurance Guide and Key Ratings and authorized to do business in the state where the Point of Interconnection is located, except in the case of the CAISO, the State of California:
 - **18.3.1** Employer's Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located, except in the case of the CAISO, the State of California.
 - 18.3.2 Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate combined single limit for personal injury, bodily injury, including death and property damage.
 - 18.3.3 Business Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage.
 - 18.3.4 Excess Public Liability Insurance over and above the Employer's Liability Commercial General Liability and Business Automobile Liability Insurance coverage, with a minimum combined single limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.
 - **18.3.5** The Commercial General Liability Insurance, Business Automobile Insurance and Excess Public Liability Insurance policies shall name the other Parties, their parents,

associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this LGIA against the Other Party Group and provide thirty (30) Calendar Days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition.

- 18.3.6 The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Public Liability Insurance policies shall contain provisions that specify that the policies are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Party shall be responsible for its respective deductibles or retentions.
- 18.3.7 The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Public Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this LGIA, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed by the Parties.
- 18.3.8 The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this LGIA.
- 18.3.9 Within ten (10) Calendar Days following execution of this LGIA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) Calendar Days thereafter, each Party shall provide certification of all insurance required in this LGIA, executed by each insurer or by an authorized representative of each insurer.
- 18.3.10 Notwithstanding the foregoing, each Party may self-insure to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program; provided that, such Party's senior unsecured debt or issuer rating is BBB-, or better, as rated by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior unsecured debt rating and issuer rating are both unrated by Standard & Poor's or are both rated at less than BBB- by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9. In the event that a Party is permitted to self-insure pursuant to this Article 18.3.10, it shall notify the other Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.
- **18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this LGIA.

Article 19. Assignment

19.1 Assignment. This LGIA may be assigned by a Party only with the written consent of the other Parties; provided that a Party may assign this LGIA without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this LGIA; and provided further that the Interconnection Customer shall have the right to assign this LGIA, without the consent of the CAISO or Participating TO, for collateral security purposes to aid in

providing financing for the Large Generating Facility, provided that the Interconnection Customer will promptly notify the CAISO and Participating TO of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the CAISO and Participating TO of the date and particulars of any such exercise of assignment right(s), including providing the CAISO and Participating TO with proof that it meets the requirements of Articles 11.5 and 18.3. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this LGIA shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

Article 20. Severability

20.1 Severability. If any provision in this LGIA is finally determined to be invalid, void or unenforceable by any court or other Governmental Authority having jurisdiction, such determination shall not invalidate, void or make unenforceable any other provision, agreement or covenant of this LGIA; provided that if the Interconnection Customer (or any third party, but only if such third party is not acting at the direction of the Participating TO or CAISO) seeks and obtains such a final determination with respect to any provision of the Alternate Option (Article 5.1.2), or the Negotiated Option (Article 5.1.4), then none of the provisions of Article 5.1.2 or 5.1.4 shall thereafter have any force or effect and the Parties' rights and obligations shall be governed solely by the Standard Option (Article 5.1.1).

Article 21. Comparability

21.1 Comparability. The Parties will comply with all applicable comparability and code of conduct laws, rules and regulations, as amended from time to time.

Article 22. Confidentiality

22.1 Confidentiality. Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by any of the Parties to the other Parties prior to the execution of this LGIA.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Parties receiving the information that the information is confidential.

If requested by any Party, the other Parties shall provide in writing, the basis for asserting that the information referred to in this Article 22 warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

- **22.1.1 Term.** During the term of this LGIA, and for a period of three (3) years after the expiration or termination of this LGIA, except as otherwise provided in this Article 22, each Party shall hold in confidence and shall not disclose to any person Confidential Information.
- **22.1.2 Scope.** Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes,

publicly known, through no wrongful act or omission of the receiving Party or Breach of this LGIA; or (6) is required, in accordance with Article 22.1.7 of this LGIA, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this LGIA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

- 22.1.3 Release of Confidential Information. No Party shall release or disclose Confidential Information to any other person, except to its employees, consultants, Affiliates (limited by the Standards of Conduct requirements set forth in Part 358 of FERC's Regulations, 18 C.F.R. 358), subcontractors, or to parties who may be or considering providing financing to or equity participation with the Interconnection Customer, or to potential purchasers or assignees of the Interconnection Customer, on a need-to-know basis in connection with this LGIA, unless such person has first been advised of the confidentiality provisions of this Article 22 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 22.
- **22.1.4 Rights.** Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Parties. The disclosure by each Party to the other Parties of Confidential Information shall not be deemed a waiver by a Party or any other person or entity of the right to protect the Confidential Information from public disclosure.
- **22.1.5 No Warranties.** The mere fact that a Party has provided Confidential Information does not constitute a warranty or representation as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to the other Parties nor to enter into any further agreements or proceed with any other relationship or joint venture.
- **22.1.6 Standard of Care.** Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under this LGIA or its regulatory requirements.
- 22.1.7 Order of Disclosure. If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Parties with prompt notice of such request(s) or requirement(s) so that the other Parties may seek an appropriate protective order or waive compliance with the terms of this LGIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.
- **22.1.8 Termination of Agreement.** Upon termination of this LGIA for any reason, each Party shall, within ten (10) Calendar Days of receipt of a written request from another Party, use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the other Party) or return to the other Party, without retaining copies thereof, any and all written or electronic Confidential Information received from the other Party.

- 22.1.9 Remedies. The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's Breach of its obligations under this Article 22. Each Party accordingly agrees that the other Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Article 22, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 22, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 22.
- 22.1.10 Disclosure to FERC, its Staff, or a State. Notwithstanding anything in this Article 22 to the contrary, and pursuant to 18 C.F.R. section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this LGIA, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. section 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties to this LGIA prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other Parties to the LGIA when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.
- 22.1.11 Subject to the exception in Article 22.1.10, Confidential Information shall not be disclosed by the other Parties to any person not employed or retained by the other Parties, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute: (iii) otherwise permitted by consent of the other Parties, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this LGIA or as a transmission service provider or a Balancing Authority including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. The Party asserting confidentiality shall notify the other Parties in writing of the information it claims is confidential. Prior to any disclosures of another Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

Article 23. Environmental Releases

23.1 Each Party shall notify the other Parties, first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Large Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Parties. The notifying Party shall: (i) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than twenty-four hours after such Party becomes aware of the occurrence; and (ii)

promptly furnish to the other Parties copies of any publicly available reports filed with any Governmental Authorities addressing such events.

Article 24. Information Requirements

- **24.1 Information Acquisition.** The Participating TO and the Interconnection Customer shall submit specific information regarding the electrical characteristics of their respective facilities to each other as described below and in accordance with Applicable Reliability Standards.
- 24.2 Information Submission by Participating TO. The initial information submission by the Participating TO shall occur no later than one hundred eighty (180) Calendar Days prior to Trial Operation and shall include the Participating TO's Transmission System information necessary to allow the Interconnection Customer to select equipment and meet any system protection and stability requirements, unless otherwise agreed to by the Participating TO and the Interconnection Customer. On a monthly basis the Participating TO shall provide the Interconnection Customer and the CAISO a status report on the construction and installation of the Participating TO's Interconnection Facilities and Network Upgrades, including, but not limited to, the following information: (1) progress to date; (2) a description of the activities since the last report; (3) a description of the action items for the next period; and (4) the delivery status of equipment ordered.
- 24.3 Updated Information Submission by Interconnection Customer. The updated information submission by the Interconnection Customer, including manufacturer information, shall occur no later than one hundred eighty (180) Calendar Days prior to the Trial Operation. The Interconnection Customer shall submit a completed copy of the Electric Generating Unit data requirements contained in Appendix 1 to the GIPLGIP. It shall also include any additional information provided to the Participating TO and the CAISO for the Interconnection Studies. Information in this submission shall be the most current Electric Generating Unit design or expected performance data. Information submitted for stability models shall be compatible with the Participating TO and CAISO standard models. If there is no compatible model, the Interconnection Customer will work with a consultant mutually agreed to by the Parties to develop and supply a standard model and associated information.

If the Interconnection Customer's data is materially different from what was originally provided to the Participating TO and the CAISO for the Interconnection Studies, then the Participating TO and the CAISO will conduct appropriate studies pursuant to the GIPLGIP to determine the impact on the Participating TO's Transmission System and affected portions of the CAISO Controlled Grid based on the actual data submitted pursuant to this Article 24.3. The Interconnection Customer shall not begin Trial Operation until such studies are completed and all other requirements of this LGIA are satisfied.

24.4 Information Supplementation. Prior to the Trial Operation date, the Parties shall supplement their information submissions described above in this Article 24 with any and all "as-built" Electric Generating Unit information or "as-tested" performance information that differs from the initial submissions or, alternatively, written confirmation that no such differences exist. The Interconnection Customer shall conduct tests on the Electric Generating Unit as required by Good Utility Practice such as an open circuit "step voltage" test on the Electric Generating Unit to verify proper operation of the Electric Generating Unit's automatic voltage regulator.

Unless otherwise agreed, the test conditions shall include: (1) Electric Generating Unit at synchronous speed; (2) automatic voltage regulator on and in voltage control mode; and (3) a five percent (5 percent) change in Electric Generating Unit terminal voltage initiated by a change in the voltage regulators reference voltage. The Interconnection Customer shall provide validated test recordings showing the responses of Electric Generating Unit terminal and field voltages. In the event that direct recordings of these voltages is impractical, recordings of other voltages or currents that mirror the response of the Electric Generating Unit's terminal or field voltage are acceptable if information necessary to translate these alternate quantities to actual Electric

Generating Unit terminal or field voltages is provided. Electric Generating Unit testing shall be conducted and results provided to the Participating TO and the CAISO for each individual Electric Generating Unit in a station.

Subsequent to the Commercial Operation Date, the Interconnection Customer shall provide the Participating TO and the CAISO any information changes due to equipment replacement, repair, or adjustment. The Participating TO shall provide the Interconnection Customer any information changes due to equipment replacement, repair or adjustment in the directly connected substation or any adjacent Participating TO-owned substation that may affect the Interconnection Customer's Interconnection Facilities equipment ratings, protection or operating requirements. The Parties shall provide such information pursuant to Article 5.19.

Article 25. Information Access And Audit Rights

- 25.1 Information Access. Each Party (the "disclosing Party") shall make available to the other Party information that is in the possession of the disclosing Party and is necessary in order for the other Party to: (i) verify the costs incurred by the disclosing Party for which the other Party is responsible under this LGIA; and (ii) carry out its obligations and responsibilities under this LGIA. The Parties shall not use such information for purposes other than those set forth in this Article 25.1 and to enforce their rights under this LGIA. Nothing in this Article 25 shall obligate the CAISO to make available to a Party any third party information in its possession or control if making such third party information available would violate a CAISO Tariff restriction on the use or disclosure of such third party information.
- 25.2 Reporting of Non-Force Majeure Events. Each Party (the "notifying Party") shall notify the other Parties when the notifying Party becomes aware of its inability to comply with the provisions of this LGIA for a reason other than a Force Majeure event. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this Article shall not entitle the Party receiving such notification to allege a cause for anticipatory breach of this LGIA.
- **25.3 Audit Rights.** Subject to the requirements of confidentiality under Article 22 of this LGIA, the Parties' audit rights shall include audits of a Party's costs pertaining to such Party's performance or satisfaction of obligations owed to the other Party under this LGIA, calculation of invoiced amounts, the CAISO's efforts to allocate responsibility for the provision of reactive support to the CAISO Controlled Grid, the CAISO's efforts to allocate responsibility for interruption or reduction of generation on the CAISO Controlled Grid, and each such Party's actions in an Emergency Condition.
 - 25.3.1 The Interconnection Customer and the Participating TO shall each have the right, during normal business hours, and upon prior reasonable notice to the other Party, to audit at its own expense the other Party's accounts and records pertaining to either such Party's performance or either such Party's satisfaction of obligations owed to the other Party under this LGIA. Subject to Article 25.3.2, any audit authorized by this Article shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to each such Party's performance and satisfaction of obligations under this LGIA. Each such Party shall keep such accounts and records for a period equivalent to the audit rights periods described in Article 25.4.
 - **25.3.2** Notwithstanding anything to the contrary in Article 25.3, each Party's rights to audit the CAISO's accounts and records shall be as set forth in Section 22.1 of the CAISO Tariff.

25.4 Audit Rights Periods.

- 25.4.1 Audit Rights Period for Construction-Related Accounts and Records. Accounts and records related to the design, engineering, procurement, and construction of Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades constructed by the Participating TO shall be subject to audit for a period of twenty-four months following the Participating TO's issuance of a final invoice in accordance with Article 12.2. Accounts and records related to the design, engineering, procurement, and construction of Participating TO's Interconnection Facilities and/or Stand Alone Network Upgrades constructed by the Interconnection Customer shall be subject to audit and verification by the Participating TO and the CAISO for a period of twenty-four months following the Interconnection Customer's issuance of a final invoice in accordance with Article 5.2(8).
- 25.4.2 Audit Rights Period for All Other Accounts and Records. Accounts and records related to a Party's performance or satisfaction of all obligations under this LGIA other than those described in Article 25.4.1 shall be subject to audit as follows: (i) for an audit relating to cost obligations, the applicable audit rights period shall be twenty-four months after the auditing Party's receipt of an invoice giving rise to such cost obligations; and (ii) for an audit relating to all other obligations, the applicable audit rights period shall be twenty-four months after the event for which the audit is sought; provided that each Party's rights to audit the CAISO's accounts and records shall be as set forth in Section 22.1 of the CAISO Tariff.
- **25.5 Audit Results.** If an audit by the Interconnection Customer or the Participating TO determines that an overpayment or an underpayment has occurred with respect to the other Party, a notice of such overpayment or underpayment shall be given to the other Party together with those records from the audit which supports such determination. The Party that is owed payment shall render an invoice to the other Party and such invoice shall be paid pursuant to Article 12 hereof.
 - 25.5.1 Notwithstanding anything to the contrary in Article 25.5, the Interconnection Customer's and Participating TO's rights to audit the CAISO's accounts and records shall be as set forth in Section 22.1 of the CAISO Tariff, and the CAISO's process for remedying an overpayment or underpayment shall be as set forth in the CAISO Tariff.

Article 26. Subcontractors

- **26.1 General.** Nothing in this LGIA shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this LGIA; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this LGIA in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.
- 26.2 Responsibility of Principal. The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this LGIA. The hiring Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the CAISO or Participating TO be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under Article 5 of this LGIA. Any applicable obligation imposed by this LGIA upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.
- **No Limitation by Insurance.** The obligations under this Article 26 will not be limited in any way by any limitation of subcontractor's insurance.

Article 27. Disputes

All disputes arising out of or in connection with this LGIA whereby relief is sought by or from the CAISO shall be settled in accordance with the provisions of Article 13 of the CAISO Tariff, except that references to the CAISO Tariff in such Article 13 of the CAISO Tariff shall be read as references to this LGIA. Disputes arising out of or in connection with this LGIA not subject to provisions of Article 13 of the CAISO Tariff shall be resolved as follows:

- 27.1 Submission. In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with this LGIA or its performance, such Party (the "disputing Party") shall provide the other Party with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this LGIA.
- 27.2 External Arbitration Procedures. Any arbitration initiated under this LGIA shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) Calendar Days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules") and any applicable FERC regulations; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Article 27, the terms of this Article 27 shall prevail.
- 27.3 Arbitration Decisions. Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of this LGIA and shall have no power to modify or change any provision of this Agreement in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator(s) must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.
- **27.4 Costs.** Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

Article 28. Representations, Warranties And Covenants

28.1 General. Each Party makes the following representations, warranties and covenants:

- **28.1.1 Good Standing.** Such Party is duly organized, validly existing and in good standing under the laws of the state in which it is organized, formed, or incorporated, as applicable; that it is qualified to do business in the state or states in which the Large Generating Facility, Interconnection Facilities and Network Upgrades owned by such Party, as applicable, are located; and that it has the corporate power and authority to own its properties, to carry on its business as now being conducted and to enter into this LGIA and carry out the transactions contemplated hereby and perform and carry out all covenants and obligations on its part to be performed under and pursuant to this LGIA.
- **28.1.2 Authority.** Such Party has the right, power and authority to enter into this LGIA, to become a Party hereto and to perform its obligations hereunder. This LGIA is a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).
- **28.1.3 No Conflict.** The execution, delivery and performance of this LGIA does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Party, or any judgment, license, permit, order, material agreement or instrument applicable to or binding upon such Party or any of its assets.
- **28.1.4 Consent and Approval.** Such Party has sought or obtained, or, in accordance with this LGIA will seek or obtain, each consent, approval, authorization, order, or acceptance by any Governmental Authority in connection with the execution, delivery and performance of this LGIA, and it will provide to any Governmental Authority notice of any actions under this LGIA that are required by Applicable Laws and Regulations.

Article 29. [Reserved]

Article 30. Miscellaneous

- **30.1 Binding Effect.** This LGIA and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- **30.2 Conflicts.** In the event of a conflict between the body of this LGIA and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this LGIA shall prevail and be deemed the final intent of the Parties.
- 30.3 Rules of Interpretation. This LGIA, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this LGIA, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this LGIA), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any Applicable Laws and Regulations means such Applicable Laws and Regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article of this LGIA or such Appendix to this LGIA, or such Section to the GIPLGIP or such Appendix to the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references

to this LGIA as a whole and not to any particular Article or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".

- **30.4 Entire Agreement.** This LGIA, including all Appendices and Schedules attached hereto, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between or among the Parties with respect to the subject matter of this LGIA. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this LGIA.
- **30.5 No Third Party Beneficiaries.** This LGIA is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.
- **30.6 Waiver.** The failure of a Party to this LGIA to insist, on any occasion, upon strict performance of any provision of this LGIA will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this LGIA shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this LGIA. Termination or Default of this LGIA for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO. Any waiver of this LGIA shall, if requested, be provided in writing.

- **30.7 Headings.** The descriptive headings of the various Articles of this LGIA have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this LGIA.
- **30.8 Multiple Counterparts.** This LGIA may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- **30.9** Amendment. The Parties may by mutual agreement amend this LGIA by a written instrument duly executed by all of the Parties. Such amendment shall become effective and a part of this LGIA upon satisfaction of all Applicable Laws and Regulations.
- **30.10 Modification by the Parties.** The Parties may by mutual agreement amend the Appendices to this LGIA by a written instrument duly executed by all of the Parties. Such amendment shall become effective and a part of this LGIA upon satisfaction of all Applicable Laws and Regulations.
- **30.11** Reservation of Rights. The CAISO and Participating TO shall each have the right to make a unilateral filing with FERC to modify this LGIA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles and Appendices of this LGIA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these Articles and Appendices:

Recitals, 1, 2.1, 2.2, 2.3, 2.4, 2.6, 3.1, 3.3, 4.1, 4.2, 4.3, 4.4, 5 preamble, 5.4, 5.7, 5.8, 5.9, 5.12, 5.13, 5.18, 5.19.1, 7.1, 7.2, 8, 9.1, 9.2, 9.3, 9.5, 9.6, 9.7, 9.8, 9.10, 10.3, 11.4, 12.1, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24.3, 24.4, 25.1, 25.2, 25.3 (excluding

subparts), 25.4.2, 26, 28, 29, 30, Appendix D, Appendix F, Appendix G, and any other Article not reserved exclusively to the Participating TO or the CAISO below.

The Participating TO shall have the exclusive right to make a unilateral filing with FERC to modify this LGIA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles and Appendices of this LGIA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these Articles and Appendices:

2.5, 5.1, 5.2, 5.3, 5.5, 5.6, 5.10, 5.11, 5.14, 5.15, 5.16, 5.17, 5.19 (excluding 5.19.1), 6, 7.3, 9.4, 9.9, 10.1, 10.2, 10.4, 10.5, 11.1, 11.2, 11.3, 11.5, 12.2, 12.3, 12.4, 24.1, 24.2, 25.3.1, 25.4.1, 25.5 (excluding 25.5.1), 27 (excluding preamble), Appendix A, Appendix B, Appendix C, and Appendix E.

The CAISO shall have the exclusive right to make a unilateral filing with FERC to modify this LGIA pursuant to section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder with respect to the following Articles of this LGIA and with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation covered by these Articles:

3.2, 4.5, 11.6, 25.3.2, 25.5.1, and 27 preamble.

The Interconnection Customer, the CAISO, and the Participating TO shall have the right to make a unilateral filing with FERC to modify this LGIA pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this LGIA shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

- **30.12 No Partnership.** This LGIA shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership among the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.
- **30.13 Joint and Several Obligations.** Except as otherwise provided in this LGIA, the obligations of the CAISO, the Participating TO, and the Interconnection Customer are several, and are neither joint nor joint and several.

IN WITNESS WHEREOF, the Parties have executed this LGIA in multiple originals, each of which shall constitute and be an original effective agreement among the Parties.

[Insert name	of Inter	rconnection	Customer'
IIIISCI I IIAIIIC	OI IIILEI	COILLECTION	Gustonie

Ву:	
Title:	
Date:	

[Insert name of Participating TO]
By:
Title:
Date:
California Independent System Operator Corporation
Ву:
Title:
Date:
Appendix A Interconnection Facilities & Network & Distribution Upgrades To LGIA
Interconnection Facilities, Network Upgrades and Distribution Upgrades
1. Interconnection Facilities:
(a) [insert Interconnection Customer's Interconnection Facilities]:
(b) [insert Participating TO's Interconnection Facilities]:
2. Network Upgrades:
(a) [insert Stand Alone Network Upgrades]:
(b) [insert Other Network Upgrades]:
(i) [insert Participating TO's Reliability Network Upgrades]
(ii) [insert Participating TO's Delivery Network Upgrades]
3. Distribution Upgrades:

App	endix	B Mi	lestones
-----	-------	------	----------

To LGIA

Milestones

Appendix C Interconnection Details

To LGIA

Interconnection Details

Appendix D Security Arrangements Details

To LGIA

Security Arrangements Details

Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, all Participating TOs, market participants, and Interconnection Customers interconnected to the CAISO Controlled Grid to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

The Interconnection Customer shall meet the requirements for security implemented pursuant to the CAISO Tariff, including the CAISO's standards for information security posted on the CAISO's internet web site at the following internet address: http://www.caiso.com/pubinfo/info-security/index.html.

Appendix E Commercial Operation Date

To LGIA

Commercial Operation Date

[This Appendix E sets forth a form of letter to be provided by the Interconnection Customer to the CAISO and Participating TO to provide formal notice of the Commercial Operation of an Electric Generating Unit.]

[Date]

[CAISO Address]

[Participating TO Address]

Re:		Electric Generating Unit
Dea	ar	:
confirms tha Electric Gen the CAISO's	t [Interconnection erating Unit, effect	ection Customer] has completed Trial Operation of Unit No This letter Customer] commenced Commercial Operation of Unit No at the ctive as of [Date plus one day] and that [Interconnection Customer] provided onnel advance notice of its intended Commercial Operation Date no less to that date.
Tha	ank you.	
[Sig	gnature]	
[Int	erconnection Cu	ustomer Representative]
Appendix F	Addresses For	Delivery Of Notices And Billings
A d duanana	for Doliners of N	To LGIA
Addresses	for Delivery of r	Notices and Billings
Notices:		
<u>Par</u>	ticipating TO:	
	[To be suppl	ied.]
<u>Inte</u>	rconnection Cust	omer:
	[To be suppl	ied.]
<u>CAI</u>	ISO:	
	[To be suppl	ied.]
Billings and	d Payments:	
<u>Par</u>	ticipating TO:	
	[To be suppl	ied.]
Inte	rconnection Cust	omer:

[To be supplied.]

[To be supplied.] Alternative Forms of Delivery of Notices (telephone, facsimile or e-mail): Participating TO: [To be supplied.] Interconnection Customer: [To be supplied.]

Appendix G Customer's Share Of Network Upgrade Costs
To LGIA

[To be supplied.]

CAISO:

Interconnection Customer's Proportional Share of Costs of Network Upgrades for Applicable Project Group

Appendix H Interconnection Requirements for a Wind Generating Plant To LGIA

INTERCONNECTION REQUIREMENTS FOR A WIND GENERATING PLANT

Appendix H sets forth requirements and provisions specific to a wind generating plant. All other requirements of this LGIA continue to apply to wind generating plant interconnections.

A. Technical Standards Applicable to a Wind Generating Plant

i. Low Voltage Ride-Through (LVRT) Capability

A wind generating plant shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below.

All wind generating plants subject to FERC Order No. 661 must meet the following requirements:

- 1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the Participating TO. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the CAISO Controlled Grid. A wind generating plant shall remain interconnected during such a fault on the CAISO Controlled Grid for a voltage level as low as zero volts, as measured at the high voltage side of the wind GSU.
- 2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.
- 3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
- 4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAr Compensator) within the wind generating plant or by a combination of generator performance and additional equipment.
- 5. Existing individual generator units that are, or have been, interconnected to the CAISO Controlled Grid at the same location at the effective date of the Appendix H LVRT Standard are exempt from meeting the Appendix H LVRT Standard for the remaining life of the existing generation equipment. Existing individual generator units that are replaced are required to meet the Appendix H LVRT Standard.

ii. Power Factor Design Criteria (Reactive Power)

A wind generating plant shall operate within a power factor within the range of 0.95 leading to 0.95 lagging, measured at the Point of Interconnection as defined in this LGIA in order to maintain a specified voltage schedule, if the Phase II Interconnection Study shows that such a requirement is necessary to ensure safety or reliability. The power factor range standard can be met by using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors, or a combination of the two, if agreed to by the Participating TO and CAISO. The Interconnection Customer shall not disable power factor equipment while the wind plant is in operation. Wind plants shall also be able to provide sufficient dynamic voltage support in lieu of the power system stabilizer and automatic voltage regulation at the generator excitation system if the Phase II Interconnection Study shows this to be required for system safety or reliability.

iii. Supervisory Control and Data Acquisition (SCADA) Capability

The wind plant shall provide SCADA capability to transmit data and receive instructions from the Participating TO and CAISO to protect system reliability. The Participating TO and CAISO and the wind plant Interconnection Customer shall determine what SCADA information is essential for the proposed wind plant, taking into account the size of the plant and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

* * *

Attachment C – Direct Testimony of Stephen Rutty

Generator Interconnection Procedures Tariff Amendment

California Independent System Operator Corporation

1			
2		UNITED STATES OF AMERICA	
3		BEFORE THE EEDERAL ENERGY RECHLATORY COMMISSION	
4 5		FEDERAL ENERGY REGULATORY COMMISSION	
6			
7	Calif	fornia Independent System) Docket No. ER11000	
8	Ope	erator Corporation)	
9			
10 11		PREPARED DIRECT TESTIMONY	
12		OF	
13		STEPHEN RUTTY	
14			
15			
16	Intro	oduction_	
10	Intro	<u> </u>	
17	Q.	Please state your name and business address.	
18	A.	My name is Stephen Rutty. My business address is California Independent	
10	A.	wy name is Stephen Rutty. Wy business address is Camorna independent	
19		System Operator Corporation (ISO or CAISO), 151 Blue Ravine Road, Folsom,	,
20		California 95630.	
_0			
21			
22	Q.	By whom and in what capacity are you employed?	
23	A.	I am the Manager of Grid Assets at the ISO.	
24			
2.5	•		
25	Q.	Please describe your professional and educational background.	
26	A.	I received a Bachelor of Science in Electrical Engineering (BSEE) from	
27		California Polytechnic State University, San Luis Obispo, and a Management for	or
28		Technical Personnel Certificate from the University of California, Los Angeles.	.]
29		am registered in the State of California as a Professional Engineer in Electrical	
30		Engineering. I worked for the Los Angeles Department of Water and Power for	r

responsibilities, most recently in the Transmission Engineering section. I joined the ISO in 2000 as a Transmission Engineer in Grid Assets, responsible for implementing the ISO Maintenance Standards. Over the last 10 years, my responsibilities were increased, as I was promoted to Senior Engineer and then to Lead Transmission Engineer. In early 2007, I was promoted to Manager of Grid Assets. As Manager of Grid Assets, I oversee the Transmission Maintenance group, the Loads and Resources group, and the Resources Interconnections group.

9

10

1

2

3

4

5

6

7

8

Q. What subjects does your testimony address?

11 A. My testimony explains the need for reform of the ISO's small generator 12 interconnection process and the reasons why the ISO is proposing to address this 13 need through the implementation of integrated Generator Interconnection 14 Procedures ("GIP"), which will combine provisions to interconnect Small 15 Generating Facilities and Large Generating Facilities into a single process. 16 Structurally, this will mean that the ISO's Small Generator Interconnection 17 Procedures ("SGIP") and Large Generator Interconnection Procedures ("LGIP") 18 will be contained in one set of tariff provisions outlining the interconnection 19 process. I will discuss the primary elements of the GIP and detail why certain 20 policy decisions were made.

21

- 1 Q. Please describe your role in the development of the GIP tariff amendment.
- 2 A. As mentioned in the prior question, I oversee the Resources Interconnection group,
- which is responsible, among other things, for the implementation of both the
- 4 ISO's LGIP and SGIP. In this capacity, I have been responsible for the
- 5 development of the GIP from its beginning and will be responsible for its
- 6 implementation.

7

8

- Q. Please briefly summarize your testimony.
- 9 **A.** I will explain the reasons why the ISO, in collaboration with stakeholders,
- developed the GIP tariff amendment. I will then discuss in detail the primary
- 11 components of the GIP tariff amendment and explain the rationales for those
- components where discussion of the rationales is warranted.

13

14

Reasons for the GIP Tariff Amendment

- 15 Q. Please describe the circumstances that gave rise to the GIP proposal.
- 16 **A.** The foundation for the ISO's current process for interconnecting small generators
- derives from the Commission's Order No. 2006 and its progeny. The ISO's SGIP
- and accompanying Small Generator Interconnection Agreement (SGIA), which
- incorporate the directives of Order No. 2006, have insured that small generator
- interconnection customers in California have open access to the ISO's
- 21 transmission system. However, over the past few years, several factors have
- presented significant challenges to the efficiency of the ISO's present small
- 23 generator interconnection process. These challenges have resulted in a substantial

1		backlog of pending small generator interconnection requests, thus undermining
2		one of the fundamental rationales underlying Order No. 2006: that of providing a
3		streamlined interconnection process that allows for the accelerated
4		interconnection of smaller generators, particularly those that have minimal impact
5		on the transmission system.
6		
7	Q.	What are the challenges that the ISO faces with respect to its current small
8		generator interconnection process?
9	A.	There are two main, interrelated challenges faced by the ISO regarding the small
10		generator interconnection process. First, in the past three years, a large and
11		increasing volume of small generators have sought to interconnect to the ISO's
12		transmission grid under the SGIP. Second, due to the fact that the ISO's SGIP
13		and LGIP utilize different study processes, timing conflicts have arisen between
14		studies of Small Generating Facilities under the SGIP and studies of Large
15		Generating Facilities under the LGIP.
16		
17	Q.	Please describe the problem with the increased volume of studies of Small
18		Generating Facilities under the SGIP.
19	A.	Over the past three years, the ISO has experienced a significant increase in the
20		number of small generating facilities seeking interconnection to the ISO
21		controlled grid under the SGIP due in large part to California's ambitious
22		renewable portfolio standard goals. In 2007, there were fewer than 10
23		interconnection requests made under the SGIP. However, from 2008 through

	small generator requests under serial study procedures?
Q.	Why does the ISO's specific situation make it difficult to efficiently process
	efficient means for realizing the goals of Order No. 2006.
	serial approach as the default study process for small generators is not the most
	large and increasing volume of small generator interconnection requests, using a
	However, because of the unique situation confronting the ISO with respect to the
	advantages for both interconnecting generators and transmission providers.
	recognizes that, in many situations, a serial interconnection study process offers
	impossible for the ISO to meet the study timelines set forth in the SGIP. The ISO
	interconnection process, particularly the serial study procedures, such that it is
	This large number of requests places significant pressures on the ISO's
	facilities will continue to increase, at least for the next several years.
	Instead, the ISO anticipates that the number of applications for small generator
	renewable resources by the year 2020, the ISO does not expect this trend to abate.
	portfolio standard goals target serving 33 percent of the State's retail load from
	renewable resources such as solar and wind. Given that California's renewable
	SGIP totaling 2,978 MW, all but one of which will produce energy from
	Currently, there are 160 active proposed small generating facilities under the
	over a hundred and thirty of which have been received in this year alone.
	2010, the ISO has received over 180 small generator interconnection requests,

Under the SGIP's serial study process, each project is studied one at a time, in succession. The process of determining what transmission upgrades are needed to support new interconnecting generation is done incrementally. Under a serial approach, the analysis to determine the next increment of transmission is performed at the individual generation project level -- what is the next increment of transmission upgrade triggered by adding the new generation facility?

Accordingly, each successive project is studied based on a transmission system that assumes the upgrades required by preceding projects. Because each project has its own separate timeline, the studies for a particular project cannot be undertaken until studies for previous electrically related projects are completed.

A.

Therefore, as more projects enter the queue, an increasingly large backlog develops, because later projects that are electrically related to earlier projects must wait for the study results of the projects ahead of them before they can, in turn, be studied. Because of this, and the fact that the SGIP provides interconnection customers with discrete periods in which they can make decisions regarding how and if they wish to proceed in the process, this situation cannot be addressed in any meaningful way by simply devoting more resources in the study process. The problem is that the transmission system configuration against which the later queued projects will be studied (the "base case") keeps changing.

This situation is further exacerbated by project withdrawals, which often require that the ISO restudy projects later in the queue because those projects were

1		originally studied assuming the interconnection of the withdrawing customer.
2		This can lead to a cascading effect of further withdrawals, which in turn creates
3		the need for further restudies.
4		
5	Q.	How long does the ISO estimate it would take to clear the existing backlog of
6		small generator interconnection requests using the current serial study
7		approach?
8	A.	Assuming a best-case scenario, that is, a scenario involving no withdrawals, no
9		restudies, and no interactions with ongoing LGIP clusters, the ISO estimates that
10		it would take as long as six to eight years from October 1, 2010 to complete the
11		studies for all small generators currently in the ISO's queue.
12		
14		
13	Q.	Please describe the timing conflicts that have arisen between studies of Small
	Q.	Please describe the timing conflicts that have arisen between studies of Small Generating Facilities under the SGIP and studies of Large Generating
13	Q.	
13 14	Q.	Generating Facilities under the SGIP and studies of Large Generating
131415		Generating Facilities under the SGIP and studies of Large Generating Facilities under the LGIP.
13 14 15 16		Generating Facilities under the SGIP and studies of Large Generating Facilities under the LGIP. Another problem causing bottlenecks in the SGIP process is the fact that the
13 14 15 16 17		Generating Facilities under the SGIP and studies of Large Generating Facilities under the LGIP. Another problem causing bottlenecks in the SGIP process is the fact that the ISO's current interconnection procedures do not account for the interdependency
13 14 15 16 17		Generating Facilities under the SGIP and studies of Large Generating Facilities under the LGIP. Another problem causing bottlenecks in the SGIP process is the fact that the ISO's current interconnection procedures do not account for the interdependency between "small" (up to 20 MW) and "large" (greater than 20 MW) generators.
13 14 15 16 17 18		Generating Facilities under the SGIP and studies of Large Generating Facilities under the LGIP. Another problem causing bottlenecks in the SGIP process is the fact that the ISO's current interconnection procedures do not account for the interdependency between "small" (up to 20 MW) and "large" (greater than 20 MW) generators. Although the SGIP and LGIP processes are treated separately as a tariff matter,
13 14 15 16 17 18 19 20		Generating Facilities under the SGIP and studies of Large Generating Facilities under the LGIP. Another problem causing bottlenecks in the SGIP process is the fact that the ISO's current interconnection procedures do not account for the interdependency between "small" (up to 20 MW) and "large" (greater than 20 MW) generators. Although the SGIP and LGIP processes are treated separately as a tariff matter, there is no practical difference between small generators and large generators in

grid, regardless of whether they are considered "small" or "large" for tariff purposes.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

1

2

As I have explained, the ISO processes SGIP interconnection requests under serial study procedures, while interconnection requests under the LGIP are processed in two group studies (the Phase I and Phase II interconnection studies) as part of annual queue clusters. The timing differences between the SGIP and LGIP processes make performing studies in an accurate and timely manner more difficult for customers in both processes. The primary problem is that the base cases used in SGIP studies often do not reflect the impact of generation in the most recent LGIP cluster. The LGIP base cases are updated after every Phase I and Phase II Interconnection Study, or approximately twice a year. Therefore, if a small generation project is electrically related to one or more projects being studied in a large generator cluster, the ISO must make a choice between delaying the small generator's study until the LGIP cluster study is completed, and the base case updated, or providing an SGIP study that makes assumptions regarding the outcome of the LGIP cluster study, which may need to be revised once the cluster study is completed.

19

20

21

22

23

Q. Is one of these choices preferable over the other?

A. Not really, no. Both choices involve negative repercussions to small generator interconnection customers. On the one hand, small generator customers understandably do not like waiting for the conclusion of LGIP cluster studies in

order to have their own studies performed, because any study delays will translate into delays in finalizing their interconnections and achieving commercial operation, which can potentially jeopardize the small generator's ability to obtain or maintain financing and increase the carrying costs for site leases.

On the other hand, moving forward based on assumptions regarding the conclusions of cluster studies often results in the need for revisions to the small generator's studies after the cluster studies are completed. Such revisions introduce delays into the process, and may also expose small generator customers to substantial increases in financial responsibility for network upgrades, if additional upgrades are required as a result of the outcome of the LGIP cluster. Unlike the clustered LGIP process, the SGIP process does not include cost caps on the customer's financing responsibility. Therefore, SGIP Interconnection Customers can be fully exposed to such increases. In sum, as long as the SGIP and LGIP interconnection study processes remain on different tracks, the study results will, of necessity, result in delays and cost uncertainty.

Q. How will the GIP proposal address these problems?

A. First, the GIP proposal will address the problem posed by the volume and timing
20 of interconnection requests because it will group small generator requests, by
21 default, in annual queue clusters and study electrically related projects using
22 group studies. Because all projects within a particular queue cluster will have the
23 same priority, delays associated with the need to defer studies of later queued

projects in order to complete the studies of electrically related earlier queued projects will be eliminated.

As with its earlier reforms aimed at large generator interconnections, the ISO carefully considered the benefits associated with the serial processing of small generator requests, such as the clear delineation of priorities and rights, but ultimately concluded that, given the large and increasing volume of interconnection requests, continuing to use a serial process as a default study procedure would be nearly impossible to manage, and would result in even greater backlogs and longer delays. The ISO believes that such an outcome would be unreasonable and inconsistent with the principles of Order No. 2006. Moreover, the ISO has had good results to date with the clustering process for large generators that it implemented in 2008 as a result of its Generation Interconnection Process Reform ("GIPR") tariff amendment, and believes that similar results can be achieved by applying this approach to small generator requests.

Q. How will the ISO address the issue of timing conflicts between the SGIP and LGIP processes?

A. The ISO proposes to account for the interdependency between small and large generator requests by combining the small and large generator processes into an integrated set of procedures that constitute the GIP. Under this approach, both small and large generators will submit interconnection requests into annual queue

clusters and, to the extent they are electrically related, they will be studied together. By studying both small and large projects at the same time, the GIP will eliminate the timing conflicts between the SGIP and LGIP processes, thereby streamlining the interconnection of small generators to the ISO controlled grid.

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

A.

1

2

3

4

Q. Will this integrated approach disadvantage small generators relative to the current SGIP process?

No, quite the opposite. The ISO has developed the GIP proposal in close cooperation with its stakeholders over the past eight months, and firmly believes that the integrated approach to interconnection that it is proposing in this filing will result in the best process for small generators seeking to interconnect to the ISO controlled grid. In this respect, it is important to understand that the GIP proposal does not consist of merely throwing small generator requests into the existing large generator process, but rather, represents a holistic integration and refinement of the ISO's interconnection procedures, so that both small and large generator projects can be processed in the fairest and most efficient manner possible, while recognizing and accounting for the unique characteristics of small generators and providing them, where appropriate, an expedited path to interconnection. This is accomplished through a number of elements, many of which I will discuss in further detail below. However, for summary purposes, I will provide here a list of some of the primary benefits and improvements that the GIP will provide to small generators:

1	• Study deposits based on project size that will generally be less than the
2	average study costs under the SGIP.
3	• Lower financial security deposit requirements for small generators.
4	• Expansion of the existing fast track interconnection process from 2 to 5
5	MW, so as to allow more projects to qualify under this process.
6	• Enhanced deliverability options that will allow existing small generators,
7	as well as those currently in the study process, to obtain full capacity
8	deliverability status for their facilities through a shorter process and at
9	lower cost than under the ISO's current procedures.
10	• Reduction in the overall cluster study processing timelines from those
11	currently set forth in the LGIP, resulting in an overall study timeline that is
12	only minimally longer than the best-case SGIP timeline.
13	• Introduction of an independent study process to allow the expedited
14	processing of those requests that are electrically independent of other
15	requests.
16	• Increased and earlier financial certainty for customers through the
17	application of a cap on network upgrade costs based on the results of the
18	Phase I interconnection study.
19	• Fairer allocation of network upgrade costs through the allocation of costs
20	to electrically related projects in each study group based on project size.
21	
22	In summary, the ISO believes that this integrated GIP approach will provide
23	substantial benefits for small generators interconnecting to the ISO controlled grid,

1		even above those that would be gained by simply adopting a clustering approach
2		within the context of the current SGIP.
3		
4	Q.	What effects will the revisions contained in the GIP tariff amendment have
5		on the timeline for processing Interconnection Requests for Small
6		Generating Facilities?
7	Α.	The GIP tariff amendment will increase by only a few months the tariff timeline
8		for Small Generation Facility applicants to complete the Interconnection Study
9		process. In return, such applicants will receive a good-faith, capped estimate of
10		their financial responsibility as soon as, and perhaps sooner than, they would
11		under the serial SGIP process. The Phase I Interconnection Study is due
12		approximately six months following close of the application window, and a more
13		refined Phase II Interconnection Study is due within 16 months of the application
14		window, with the elimination of after-the-fact revisions due to interactions with
15		LGIP studies. When compared to the open-ended and log-jammed serial SGIP
16		study process, which offers neither prompt study nor cost certainty, the clustered
17		study proposal will represent an improvement for small generators.
18		
19		In order to illustrate the timeline differences between the current LGIP and those
20		proposed under the GIP, I have included as Attachment 1 to my testimony a chart
21		that depicts the respective timelines for conducting interconnection studies under

the LGIP and the GIP.

Main Elements of the GIP Tariff Amendment

2	Q.	Please provide an overview of the main elements in the GIP tariff
3		amendment.
4	A.	A comprehensive description of the modifications proposed in the GIP tariff
5		amendment is set forth in the transmittal letter accompanying this filing. For
6		purposes of this testimony, however, I will discuss certain main elements of the
7		GIP tariff amendment:
8		• The GIP tariff amendment will modify the ISO tariff in order to process
9		both large and small generators in one annual cluster study, embodied in a
10		substantially modified form of the LGIP known as the GIP.
11		• The GIP tariff amendment will include, in addition to the existing
12		generator cluster study process, two alternative study processes: an
13		"Independent Study Process" and the "Fast Track Process," which is a
14		revised version of the process currently included in the ISO's SGIP.
15		• The GIP tariff amendment will revise the queue cluster timelines in the
16		LGIP to make the overall study process shorter and provide for two annual
17		windows during which the ISO will accept interconnection requests for
18		cluster studies.
19		• The GIP tariff amendment will revise the provisions of the LGIP
20		regarding Interconnection Financial Security.
21		• The GIP tariff amendment will add new Deliverability Assessment options
22		for both large and small generators.

1		 The GIP tariff amendment will add provisions regarding the transition of
2		existing SGIP Interconnection Requests to the GIP.
3		• The GIP tariff amendment will include in the GIP existing provisions from
4		the SGIP regarding the interconnection of certified inverter-based Small
5		Generating Facilities no larger than 10 kW.
6		I will discuss each of these main elements in turn.
7		
8	Integ	gration of Small and Large Generator Studies
9	Q.	Please describe the integration of the small and large generator study
10		processes.
11	A.	As I explained above, the primary modification that the GIP tariff amendment
12		puts in place is the processing of both small and large generator requests under
13		one set of integrated procedures, under which the default option for all generators
14		will involve inclusion in clustered studies under a modified version of the
15		procedures implemented by the ISO's earlier GIPR amendment. This involves
16		submitting interconnection requests during one of two annual cluster application
17		windows, grouping and study of projects based on their electrical relation, and
18		determination of upgrades pursuant to a two-phase study approach.
19		
20	Q.	You stated earlier that this integration would address the problem of study
21		timing conflicts between the SGIP and LGIP. Are there other benefits to
22		small generators as a result of the integration of the small generator and
23		large generator study processes?

Yes. First, under the GIP study process, small generators will benefit from having better and earlier certainty regarding their responsibility for the costs of network upgrades. Under the integrated process, both small and large generators will receive the results of the Phase I interconnection study less than 140 days after commencement of that study. As with the ISO's current LGIP, the results of the Phase I study will act as a cap on customers' liability for funding any network upgrade costs, so that any increase in upgrade costs determined after the completion of the Phase I study will not be allocated to interconnection customers, but will be borne by the applicable Participating Transmission Owner.

A.

Additionally, the integration of small and large generator study processes will ensure that the costs of network upgrades are allocated proportionally and equitably, based on each project's contribution to the need for network upgrades. Because of the "lumpy" nature of transmission upgrades, even a relatively small generation project can trigger substantial upgrades, presenting the small generator with funding obligations that can deter these projects from continuing with their interconnection requests. Under the integrated approach, upgrade costs will be shared pro rata between all small and large generators within a study group, with the allocation being based on each generator's requested level of deliverability and project size. In short, small generators will have more certainty as to their exposure to network upgrade costs, and assurance that such costs will be allocated fairly based on each project's contribution to the need for such upgrades.

Independent Study Process

- 2 Q. Please provide an overview of the Independent Study Process.
- A. The Independent Study Process provides an avenue for those interconnection customers who are electrically independent from other generators in the queue, and for whom the cluster study process timelines will not accommodate their desired commercial operations date, to be studied on an individual basis by the ISO, in coordination with the applicable Participating TO(s). If a generator is

8 deemed eligible for the Independent Study Process, the project will be studied

under a process that is very similar to the serial process in the current SGIP,

including a system impact study and (if necessary) a facilities study.

11

12

9

10

1

Q. Why did the ISO decide to include an Independent Study Process in the GIP?

13 A. In order to make the Interconnection Study process more efficient, the ISO and 14 stakeholders determined that they should add to the GIP a study process that 15 would apply to generators that can be studied and approved for interconnection 16 independent of the ISO's other study processes. The Independent Study Process 17 will permit such facilities to be studied outside of the cluster process, which will 18 benefit those Generating Facilities by allowing them to be studied on an 19 individual and expedited basis, thereby allowing them to achieve a commercial 20 operations date in advance of that which would be possible under the cluster 21 process. This will prove particularly beneficial to small generators that are 22 effectively independent from other generators in the queue by virtue of their 23 electrical remoteness, or because of their minor-to-nonexistent impact on the grid due to their small size, and will provide them with a path to a faster interconnection. The Independent Study Process track will use a serial study approach that is similar to that contained in the current SGIP. The Independent Study Process will also improve the overall efficiency of the GIP process because it will exclude projects that can be studied on their own from having to be included in the Phase I and Phase II interconnection studies for clustered projects, which have a longer study timeline.

Q. What are the eligibility criteria for inclusion in the Independent Study

Process?

A. In order to be eligible for the Independent Study Process, the Interconnection

Customer must provide an objective demonstration that inclusion in a queue

cluster will not accommodate the desired commercial operation date for the

customer's generating facility, demonstrate that the desired commercial operation

date is physically and commercially achievable, and demonstrate site exclusivity.

In addition, the proposed generator must be electrically independent of

interconnection requests included in an existing queue cluster as well as any other

generator that is currently being studied under an earlier-queued Independent

Study Process interconnection request.

Q. Why is the ISO proposing to limit eligibility for inclusion in the Independent Study Process to those customers who can demonstrate a commercial need for an earlier operation date?

1	A.	Limiting eligibility for the Independent Study Process in this fashion will promote
2		the overall viability of this process because the ISO will be able to focus its
3		resources on studying only those generators that have a legitimate commercial
4		need to be studied independently. This will ensure that the ISO can meet the
5		expedited timelines set forth in the Independent Study Process.
6		
7	Q.	Under the GIP tariff amendment, how will the ISO determine which
8		generators are "electrically independent" of other interconnection requests?
9	A.	A detailed explanation of the ISO's test for determining electrical independence
10		for purposes of the Independent Study Process is set forth in the testimony of my
11		colleague, Robert Sparks, which is included with this filing as Exhibit No. ISO-2.

13 Q. What deliverability options will be offered under the Independent Study

Process?

A.

Generators interconnecting under the Independent Study Process will only be studied as Energy-Only. If a generator under the Independent Study Process wishes to obtain Full Capacity Deliverability Status, such customers will have a deliverability assessment performed as part of the next scheduled Phase I and Phase II Interconnection Studies for queue clusters. If that assessment identifies any Delivery Network Upgrades, the Independent Study Process customer will be responsible for paying its proportionate share of the costs of those upgrades. If the generator achieves its commercial operation date before the deliverability assessment is completed and any necessary Delivery Network Upgrades are in

service, the generator will be treated as an Energy-Only facility pending the completion of the Delivery Network Upgrades.

Limiting the Independent Study Process to Energy-Only interconnections is appropriate because a Full Capacity Deliverability assessment involves a much more comprehensive study of a facility's impact on the transmission system, and one that is appropriately done in conjunction with other generators applying for interconnection during the same time period. Moreover, with respect to small generators, this process is similar to the one that currently exists under the SGIP, insofar as small generators studied under the SGIP are studied as Energy-Only and must enter the LGIP queue to obtain Full Capacity Deliverability Status. In addition, the Independent Study Process will provide small generators with more flexibility by allowing them to interconnect on an Energy-Only basis without having to wait for a deliverability assessment as part of the cluster study process.

Fast Track Process

- 17 Q. Please summarize the Fast Track Process included in the GIP.
- **A.** There is already an existing, Commission-approved Fast Track Process contained 19 in Section 2 of the SGIP. The ISO and stakeholders for the most part simply 20 imported that Fast Track Process into the GIP tariff amendment, with two 21 substantive changes which I will discuss below.

Q. Why is the ISO proposing to add the Fast Track Process to the GIP?

1	A.	The ISO believes that the Fast Track Process provides a valuable benefit to small
2		generators that are below a specified MW threshold by permitting them to
3		interconnect to the ISO controlled grid more quickly and through a more
4		streamlined process than would be possible under the standard Interconnection
5		Study process. Therefore, the ISO concluded that retaining the Fast Track
6		Process as an integral part of the GIP was the most reasonable outcome.
7		
8	Q.	What are the primary differences between the Fast Track Process under the
9		GIP tariff amendment and the Fast Track Process under the existing SGIP?
10	A.	In adapting the Fast Track Process for inclusion in the GIP, the ISO is proposing
11		two primary modifications to the SGIP Fast Track Process. The first is that the
12		current SGIP Fast Track Process is available only to proposed Small Generating
13		Facilities that are 2 MW or less in size, whereas the Fast Track Process under the
14		GIP tariff amendment will be available to proposed Small Generating Facilities
15		that are up to 5 MW. The Fast Track Process included in the GIP also omits
16		several of the screens that apply under the SGIP Fast Track Process.
17		
18	Q.	Why is the ISO proposing to increase the size threshold for the Fast Track
19		process from 2 MW to 5 MW?
20	A.	In practice, the ISO has never received an interconnection request under the Fast
21		Track Process set forth in the SGIP. Therefore, the ISO decided that it would be
22		prudent to review the Fast Track Process, in conjunction with the GIP
23		development process, to determine whether the 2 MW threshold could be

increased consistent with the purpose behind the Fast Track Process, so as to make it a more viable option for small generators.

The screens applicable under the Fast Track Process are primarily designed for radially-configured low voltage distribution systems. Although transmission systems are connected in a network configuration (where power flow is bidirectional), these screens are generally adequate for transmission system interconnections, as long as the size of generators eligible for the Fast Track Process is relatively small. From a transmission engineering perspective, a 5 MW generator is still relatively small, and generally would cause no greater impact than a 2 MW generator, such that including 5 MW facilities in the Fast Track Process will not jeopardize the safety and reliability of the ISO controlled grid.

However, it would not be feasible at this time to allow generators larger than 5 MW to participate in the Fast Track Process. In order to consider Small Generating Facilities larger than 5 MW in the Fast Track Process, additional screens would have to be developed to address the complexities involved in analyzing a networked transmission system. Because of these considerations, the ISO and stakeholders determined that the best choice is to limit the threshold increase for the Fast Track Process in the GIP to 5 MW, which will extend the benefits of the Fast Track Process to a larger pool of small generators. The ISO will continue to examine the operation of the Fast Track Process and, if it is

1		determined that larger facilities can safely be accommodated, will propose such
2		modifications to the GIP at a future time.
3		
4	Q.	What is the second primary difference between the Fast Track Process under
5		the SGIP and the Fast Track Process under the proposed GIP?
6	A.	The Fast Track Process under the proposed GIP omits several of the screens that
7		apply under the SGIP Fast Track Process. The screens omitted from the GIP are
8		as follows:
9		• The type of interconnection is to a primary distribution line;
10		• If the proposed Small Generating Facility is to be interconnected on a single-
11		phase shared secondary line, the aggregate generation capacity on the shared
12		secondary, including the proposed Small Generating Facility, cannot exceed
13		20 MW;
14		• If the proposed Small Generating Facility is single-phase and is to be
15		interconnected on a center tap neutral of a 240 volt service, the addition will
16		not create an imbalance between the two sides of the 240 volt service of more
17		than twenty (20) percent of the nameplate rating of the service transformer;
18		and
19		• No construction of facilities by the Participating TO on its own system will be
20		required to accommodate the Small Generating Facility.
21		
22	Q.	Why have the screens you described been omitted from the Fast Track
23		Process under the GIP?

1 A. As to the first three omitted screens I have listed, they frankly do not apply to 2 interconnections to the high voltage transmission system under the ISO's 3 operational control and would therefore never be a factor for interconnection 4 requests under the ISO's interconnection procedures. As to the requirement that 5 there must be no need for the Participating TO to construct facilities on its own 6 system to accommodate the Small Generating Facility, the reason for proposing to 7 eliminate this screen is that the ISO does not want to restrict interconnection 8 customers from utilizing the Fast Track Process simply because minor network 9 modifications to Participating TO's facilities may be required.

10

11

12

13

Queue Cluster Timelines

- Q. What are the main components of the revisions in the proposed GIP to the queue cluster timelines?
- 14 **A.** The GIP tariff amendment proposes two primary modifications to the cluster
 15 study timelines set forth in the current LGIP. First, the GIP shortens the overall
 16 timelines for completing each cluster study cycle by a total of six months. Second,
 17 the GIP proposes to establish two application windows for each queue cluster,
 18 each of which will remain open for thirty days.

19

- Q. Please describe the modification to the cluster study cycle timelines.
- 21 **A.** Under the proposed GIP, the timelines for both the Phase I Interconnection Study and the Phase II Interconnection Study will be significantly reduced. Under the revised timelines, the total number of days for conducting the various steps in the

Phase I Interconnection Study process (*i.e.*, the Phase I Cluster Study, the Short Circuit Duty, facility cost estimates and schedules, the Final Report, and the Final Study Report) will be shortened from 180 days under the current LGIP to 134 days under the GIP. Further, the total number of days for conducting the steps in the Phase II Interconnection Study process (*i.e.*, the Standard Project Refinement and Facilities Study and the Final Plan of Service Report) will be shortened from 330 days under the current LGIP to 196 under the GIP. Thus, the revised timelines for the Phase I and Phase II Interconnection Study processes will significantly decrease the number of days for completion of each of those processes.

Q. How do these revised study timelines compare with the study timelines for small generator projects under the current SGIP process?

A. The revised cluster study timelines under the GIP proposal result in a study process that is approximately three months longer than the process set forth in the ISO's SGIP. The ISO believes that this minor difference in timing is more than made up for by the advantages offered to small generators in the cluster study process, such as greater cost certainty earlier in the process, the elimination of delays due to factors such as the interdependency between the LGIP and SGIP and restudies due to project withdrawals, and increased time for small generators to make decisions regarding continuation in the interconnection process after receiving their Phase I study results. Indeed, given the current volume of SGIP projects, the timelines set forth in the SGIP have become virtually impossible to

meet, which further diminishes any meaning attributed to the approximately three-month difference in study timing between the GIP and SGIP.

Q. Please describe the revisions to the GIP regarding application windows.

A. In the current LGIP (Section 3.3), the ISO specified three discrete queue clusters (Transition Cluster, Cluster 1 and Cluster 2) along with specific application window dates during which interconnection requests for these queue clusters would be accepted. However, for the subsequent queue clusters (starting with Cluster 3), the LGIP specifies that the window periods will be defined in a Business Practice Manual.

In order to provide customers with more certainty, and due to the shortened study timelines, the ISO is proposing to establish fixed dates for queue cluster application windows, with additional cluster study cycle dates to be based off of these application window dates. Specifically, the ISO will provide for two annual application windows associated with each cluster. The first application window will allow customers to submit interconnection requests and receive a scoping meeting, but the studies themselves will not commence until after the closing of the second application window. The ISO added this feature at the request of stakeholders, who wished an additional opportunity to receive feedback on their interconnection requests prior to the commencement of the next queue cluster. Moreover, the ISO is limiting the application windows to thirty days in duration, based on its experience that the vast majority of interconnection requests have

1	been submitted within the last thirty days of the application windows opened to
2	date.

4

5

6

Deposit Requirements

- Q. What revisions to the deposit requirements of the current LGIP is the ISO proposing to implement in the GIP?
- First, the ISO is proposing to revise the required study deposits in the GIP. The

 current LGIP states that, to initiate an interconnection request, except with regard

 to certain small and existing generators, the interconnection customer must submit

 a \$250,000 study deposit. The GIP tariff amendment revamps this requirement to

 state that the interconnection customer must submit a study deposit equal to

 \$50,000 plus \$1,000 per MW of electrical output of the generator, up to a

 maximum of \$250,000.

14

15

- Q. What is the rationale for this change to the Interconnection Study Deposit requirement?
- 17 **A.** The ISO and stakeholders determined that the size of the study deposit should be
 18 better calibrated to the size of the proposed generator. These tariff changes will
 19 mean that the study deposit amount is "right-sized" for proposed generators that
 20 are 200 MW or less, which will provide an incentive for the interconnection
 21 customers for those proposed generators to accurately identify the ultimate size of
 22 the generators from the start, thus improving the accuracy of the applicable
 23 studies. Moreover, with respect to small generators currently processed under the

SGIP, this formula results in study deposits that are less than the average cost of studies performed under the SGIP (\$110,000 for a project obtaining all three SGIP studies). For proposed facilities that are at least 200 MW, the \$250,000 study deposit amount set forth in the current LGIP will be preserved (because each such proposed generator must pay a study deposit amount equal to \$50,000 $+ (\$1,000 \times 200) = \$250,000$).

Q. Is the ISO proposing any other revisions to the study deposit requirements currently set forth in the LGIP?

A. Yes. The provisions in the LGIP regarding study deposits currently state that, should an interconnection request be withdrawn within a specified timeframe, the ISO will refund to the customer the difference between (i) the customer's study deposit and (ii) the greater of the costs the ISO, the Participating TOs, and third parties have incurred on the customer's behalf or \$100,000, including interest. The GIP tariff amendment modifies these provisions to state that, if an interconnection request is withdrawn during that timeframe, the ISO will refund to the interconnection customer the difference between (i) the customer's study deposit and (ii) the greater of the costs the ISO and the Participating TOs have incurred on the customer's behalf or one-half of the original study deposit up to a maximum of \$100,000, including interest. This new tariff language reflects a more calibrated approach to refunds of study deposits than is reflected in the current LGIP.

1	Q.	What other deposit requirements, other than study deposits, is the ISO
2		proposing to revise in the GIP?
3	A.	The current LGIP states that each interconnection customer must demonstrate Site

Exclusivity or post a Site Exclusivity Deposit of \$250,000. The ISO and stakeholders determined that this Site Exclusivity Deposit amount was too large for proposed small generators. Therefore, the GIP tariff amendment modifies the current requirement to state that the interconnection customer must demonstrate Site Exclusivity or, for interconnection requests in a queue cluster, must post a Site Exclusivity Deposit of \$100,000 for a small generator or \$250,000 for a large generator. This modification appropriately balances the need to encourage developers to obtain site exclusivity early in the interconnection process while not imposing an unreasonable financial burden on smaller projects.

Interconnection Financial Security

- Q. How is the ISO proposing to modify the interconnection financial security requirements set forth in the LGIP for the GIP?
- **A.** The most significant change to the security requirements set forth in the current
 18 LGIP is the application of a modified version of the interconnection financial
 19 security requirements to small generating facilities. Under the GIP, small
 20 generators studied in a queue cluster or under the Independent Study Process (but
 21 not under the Fast Track Process) will be required to post interconnection
 22 financial security under the same schedule as large generators, but under revised

1		formulas for determining security for network upgrade costs, in order to reduce
2		the financial burden on small generators.
3		
4		With respect to the first posting of interconnection financial security, both small
5		and large generators will post security for network upgrades using the same
6		general formula, but the minimum amount required from small generators will be
7		\$50,000, instead of the \$500,000 required from large generators.
8		
9		With respect to the second financial security posting, the minimum posting for
10		small generators will be \$100,000, as opposed to the \$500,000 required from
11		large generators. The ISO is also adding, for all generators, a cap on financial
12		security requirements for the second posting. For large generators, that cap will
13		be \$15 million, while for small generators the cap will be \$1 million.
14		
15	Q.	Why does the GIP tariff amendment propose to modify the LGIP with
16		regard to Interconnection Financial Security requirements?
17	A.	The ISO believes that it is important that small generators be required to post
18		financial security in advance of the construction of transmission upgrades for the
19		same reasons that the ISO implemented financial security requirements for large
20		generators as part of the GIPR amendment: in order to ensure that developers
21		have sufficient "skin in the game" such that they are encouraged to make
22		decisions regarding the status of their projects as early in the process as possible.
23		This reduces the incentive for non-viable projects to remain in the interconnection

queue after the completion of the Phase I study, at which point generators should have a reasonable estimate as to their responsibility for upgrade costs. This is particularly important given the high volume of small generator requests that the ISO has received over the past two years, and expects to continue to receive over the next several years.

The ISO recognizes, however, that the need to promote rational and early decision making by developers must be appropriately balanced against the need not to create financial barriers that work to discourage the entry of viable projects into the interconnection queue, particularly for smaller projects that may not have the capital and financing resources available to larger developers. After discussing this issue with stakeholders, the ISO concluded that the minimum financial security should be reduced for small generators, and moreover, that all generators should be subject to a cap on their second posting of financial security, with small generators subject to a smaller cap relative to large generators. The ISO further worked with stakeholders to develop the specific financial security requirements for small generators which the ISO believes represent an appropriate balance between ensuring that small generators have enough "skin in the game" without discouraging small generators from seeking interconnection.

Q. Does the GIP tariff amendment contain any other significant changes to the tariff language regarding Interconnection Financial Security?

Yes. The GIP tariff amendment also adds provisions to clarify that, if the costs of the estimated network upgrades are less than the minimum posting amount, the posting amount required will be equal to the estimated amount of network upgrades. This ensures that both small and large generator interconnection customers will not be required to post financial security in excess of the total amount of network upgrade costs, which the ISO agrees would be an unreasonable result.

8

9

10

11

Additional Deliverability Assessment Options

- Q. Please explain why the GIP tariff amendment contains additional Deliverability Assessment options, and what those options are.
- 12 A. The GIP tariff amendment includes additional deliverability assessment options in 13 new Section 8 of the GIP. Specifically, the GIP tariff amendment provides large 14 generators that were previously studied as Energy-Only, as well as small 15 generators, the option, on either a one-time or an annual basis, to be studied for 16 Full Capacity Deliverability Status. This process will permit these generators to 17 obtain Full Capacity Deliverability Status that would be otherwise unavailable to 18 them. This option will be particularly valuable to small generators that have already interconnected through the SGIP process, which does not provide an 19 20 option for Full Capacity Deliverability Status.

21

22

23

Further details regarding these additional deliverability assessment options are included in the testimony of Robert Sparks.

1	

Transition of Existing SGIP Interconnection Requests to the G

- Q. How does the ISO propose to process interconnection requests submitted
 under the SGIP prior to the effective date of the GIP?
- 5 A. The ISO is proposing to divide existing SGIP customers into two categories: (1) 6 the SGIP Serial Study Group, defined as those interconnection customers with 7 valid interconnection requests submitted pursuant to the SGIP prior to December 8 19, 2010 (i.e., the proposed effective date of the GIP tariff amendment) and who 9 have executed a System Impact Study or Facilities Study Agreement providing 10 for the completion of such studies by December 19, 2010; and (2) the SGIP 11 Transition Cluster, defined as those interconnection customers with valid 12 interconnection requests submitted pursuant to the SGIP prior to December 19, 13 2010 and which have not executed a System Impact Study or Facilities Study 14 Agreement providing for the completion of such studies by December 19, 2010.

15

16

- Q. How does the ISO propose to process Interconnection Requests in the SGIP Serial Study Group?
- An interconnection request deemed to be included in the SGIP Serial Study Group
 that wishes to be studied as Energy-Only will not be required to conform to the
 provisions of the GIP. Rather, such requests will continue to be processed per the
 procedures set forth in the SGIP, unless the customer specifically indicates, in
 writing, within five (5) Business Days from the effective date of the GIP, that they
 wish to be included in either the SGIP Transition Cluster, studied for Full

	Capacity Deliverability Status, or, if eligible, studied under the Independent Study
	Process set forth in the GIP. An interconnection request deemed to be included in
	the SGIP Serial Study Group that wishes to be studied for Full Capacity
	Deliverability Status will continue to be processed per the procedures set forth in
	the SGIP as Energy-Only, with a Full Capacity Deliverability assessment to be
	performed as part of the next cluster study cycle following the completion of the
	serial portion of the generator's studies under the SGIP.
Q.	Why is the ISO proposing to limit the SGIP Serial Study Group to those
	customers who have executed a System Impact Study or Facilities Study
	Agreement providing for the completion of such studies by December 19,
	2010?
A.	The ISO is limiting the SGIP Serial Study Group in this manner for two reasons.
	First, the ISO needs to reduce the number of interconnection requests that it will
	continue to process under the SGIP in order to allow it to process these remaining
	requests within a reasonable timeframe. Likewise, the ISO believes that deferring
	interconnection requests in earlier stages of the process until later queue clusters
	will give those customers the best chance to achieve commercial operation at an
	earlier date than would be possible under the current serial process.
	At the same time, however, the ISO recognizes that customers with later-stage

interconnection requests may have placed an increased level of reliance on the

existing SGIP procedures, such that moving such requests into the new process

could cause them substantial disruption. The ISO believes that a reasonable demarcation point between earlier and late stage requests is whether customers have executed a System Impact or Facilities Study Agreement providing for the completion of such an agreement prior to the implementation of the GIP proposal, because such customers would be expected to receive their study results under the process set forth in the SGIP prior to the implementation of the GIP procedures.

A.

Q. How is the ISO proposing to process the interconnection requests in the SGIP Transition Cluster?

An interconnection customer deemed to be included in the SGIP Transition

Cluster (including those customers defined as part of the SGIP Serial Study Group

who choose to be processed in the SGIP Transition Cluster) that wishes to be

studied as Energy-Only will be processed per the procedures set forth in the GIP

and studied as part of the Phase II Interconnection Study for the ISO's first and

second queue clusters, which is scheduled to begin on January 1, 2011 and be

completed on July 31, 2011.

Alternatively, interconnection requests deemed to be included in the SGIP

Transition Cluster may, by indicating in writing within five business days from
the effective date of the GIP, elect to be studied for Full Capacity Deliverability

Status, or, if eligible, as part of the Independent Study Process set forth in the GIP.

An interconnection request deemed to be included in the SGIP Transition Cluster
that wishes to be studied for Full Capacity Deliverability Status will be studied as

Energy-Only as part of the Phase II Interconnection Study for the ISO's first and second queue clusters, with a Full Capacity Deliverability assessment to be performed as part of the ISO's fourth queue cluster, which is scheduled to begin on June 1, 2011.

5

6

Q. Why is the ISO creating this SGIP Transition Cluster?

7 A. As described above with respect to the determination regarding the SGIP Serial 8 Study Group, the ISO believes that it is reasonable to include in the GIP 9 procedures those customers that have submitted interconnection requests in the 10 SGIP, but have not signed a System Impact or Facilities Study Agreement 11 indicating a completion date prior to the effective date of the GIP. Nevertheless, 12 the ISO believes that, because these customers have already submitted 13 interconnection requests, they should be processed through the cluster study 14 procedures as soon as possible. Therefore, the ISO is proposing to include these 15 requests in the Phase II study for the first and second queue clusters. This 16 somewhat truncated study procedure is reasonable and appropriate given that 17 these projects will be studied as Energy-Only and therefore, this process will be 18 less complicated in scope and execution.

19

20

22

23

Q. Will the ISO study the SGIP Serial Study Group prior to studying the SGIP

21 **Transition Cluster?**

A. The ISO will attempt to study projects in the SGIP Serial Study Group before it studies those in the SGIP Transition Cluster. To the extent that is not possible to

1 do so, however, the ISO will study any remaining SGIP Serial Study projects as 2 expeditiously as it can based on the most recent base case data. If the ISO 3 anticipates that it will not be able to complete the studies for all SGIP Serial Study 4 Group projects prior to commencing study of the SGIP Transition Cluster, the 5 ISO will, at that time, notify any SGIP Serial Study projects that it believes it will 6 not be able to complete before the SGIP Transition Cluster, and provide those 7 customers the opportunity to switch to the SGIP Transition Cluster. 8 9 **SGIP Process for 10 kW Inverters** 10 Q. What is the ISO proposing to do with respect to the SGIP process for 10kW 11 inverters? 12 A. The GIP tariff amendment incorporates into a new Appendix 7 the application, 13 procedures, and terms and conditions for interconnecting a certified inverter-14 based Small Generating Facility no larger than 10 kW, which are also contained 15 in Attachment 5 of the existing SGIP. These provisions are unchanged from the 16 SGIP, and will provide a further option for small generators interconnecting under 17 the GIP. 18 19 Conclusion 20 Q. Does this conclude your testimony?

22

21

A.

Yes.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge.

Executed on October 18, 2010.

Stephen Rutty

Attachment D – Direct Testimony of Robert Sparks

Generator Interconnection Procedures Tariff Amendment

California Independent System Operator Corporation

1 2 3 4 5 6 7 8 9 10 11 12 13 14	UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION California Independent System Docket No. ER11000 Operator Corporation PREPARED DIRECT TESTIMONY OF ROBERT SPARKS				
15					
16	<u>Intro</u>	<u>oduction</u>			
17	Q.	Please state your name and business address.			
18	A.	My name is Robert Sparks. My business address is California Independent			
19	System Operator Corporation (ISO), 151 Blue Ravine Road, Folsom, California				
20		95630.			
21					
22	Q.	By whom and in what capacity are you employed?			
23	A.	I am the Manager of the Regional Transmission (South) Department at the ISO.			
24		Prior to holding this position, one of my primary job responsibilities was to work			
25		with ISO Participating Transmission Owners, State Agencies, and Stakeholders to			
26		create a comprehensive long-term transmission plan that is compatible with the			
27		long term resource plans of the load serving entities for California to ensure that			
28		facilities are in place as needed to economically provide wholesale electric service			
29		and to meet reliability criteria.			
30					

Q. Please describe your professional and educational background.

2 A. I received a Bachelor of Science degree in Electrical Engineering from California 3 State University, Sacramento in June 1988 and a Master of Science degree in 4 Electrical Engineering from Purdue University in August 1989. In 1989 I joined 5 Pacific Gas and Electric Company's (PG&E) Transmission Planning Department 6 and worked on California-Oregon Transmission Project design refinement studies, 7 and Qualifying Facility interconnection studies. While in that position, I 8 participated in writing "Cost-benefit analysis of power system reliability: two 9 utility case studies," which was published in IEEE Transactions on Power 10 Systems, August 1995. In 1994, I joined PG&E's System Operations Department, 11 initially as a Lead Operations Engineer and later as a Supervising Power System 12 Engineer. In November 1997, I joined the ISO as a Grid Planning Engineer and 13 performed the initial Reliability Must-Run (RMR) Study for the San Diego, 14 Fresno, and Stockton RMR areas, and reviewed the Southern California Edison 15 Company and PG&E transmission expansion plans. From December 2001 to 16 August 2002, I worked for FPL Energy as the West Coast Transmission Manager 17 for transmission related issues associated with their various generation projects in 18 the Western Electricity Coordinating Council (WECC). I rejoined the ISO in 19 September 2002 as a Senior Grid Planning Engineer and was later promoted to a 20 Lead Grid Planning Engineer, and then recently to Manager of Regional 21 Transmission (South). I have over 20 years experience in electric transmission 22 system planning and operations and I am a registered Professional Engineer in the 23 State of California.

1	
1	

- 2 Q. Please describe your role in the development of the Generation
- 3 Interconnection Procedures (GIP) proposal.
- 4 A. I was responsible for the implementation of the ISO's deliverability methodology
 5 associated with our Commission Order No. 2003 compliance. Because of my
- 6 experience from that role, I was part of the GIP design team, and provided overall
- 7 transmission planning and generation deliverability analysis expertise.

9

- Q. What is the purpose of your testimony?
- 10 A. My testimony will discuss two aspects of the ISO's GIP proposal. First, I will
- discuss the tests that the ISO proposes to use to determine whether a generator is
- electrically independent in order to qualify for processing under the Independent
- 13 Study Process. Second, I will explain the two additional deliverability
- assessments that the ISO proposes to add to the GIP.

15

16

Independent Study Process – Independence Test

- 17 Q. Please provide a brief summary of the Independent Study Process and the
- specific issue that your testimony will discuss.
- 19 A. The Independent Study Process will provide an avenue for those interconnection
- customers who are electrically independent from other generators in the queue,
- and for whom the cluster study process timelines will not accommodate their
- desired commercial operations date, to be studied on an individual and expedited
- basis by the ISO, in coordination with the applicable Participating TO(s). Further

discussion of the Independent Study Process is set forth in the testimony of Stephen Rutty (Exh. No. ISO-1). My testimony will focus on the objective tests that the ISO proposes to use to determine which generators are electrically independent of other generators currently being studied in the ISO's interconnection queue.

A.

Q. Why did the ISO adopt an objective test for determining electrical

independence?

In many cases the determination of whether a generator is electrically independent of other projects being studied in the ISO's interconnection queue can be determined simply by inspection and the application of engineering judgment.

For instance, a generator seeking to interconnect on the same transmission line as a project in an existing cluster study is not electrically independent from that project, while a generator seeking to interconnect tens of miles and several busses away from the nearest cluster project will usually be independent. However, such determinations are not always so clear, particularly when large projects are involved. For instance, a 500 MW generator, even though seeking to interconnect hundreds of miles away from the nearest project in the interconnection queue, may still have a significant impact on other projects by virtue of its large capacity. Therefore, the ISO, in conjunction with its stakeholders, determined that customers would be best served by an objective test that incorporated ISO and stakeholder input as to the most reasonable criteria for identifying those projects

1		that would have minimal or no impact on the interconnection of other projects
2		being studied in the queue.
3		
4	Q.	Under the GIP tariff amendment, how will the ISO determine which
5		generators are "electrically independent" of other interconnection requests
6		being studied in the ISO's queue?
7	Α.	Each generator seeking interconnection under the Independent Study Process
8		must pass both a flow impact test and a short circuit test in order to be considered
9		electrically independent from other projects being studied in the ISO's
10		interconnection queue. In summary, the flow impact test ensures that only
11		generators that cause a relatively minor (less than five percent) incremental power
12		flow on the closest transmission facility impacted by other projects being studied
13		in the interconnection queue will be considered electrically independent.
14		Moreover, if the generator is expected to impact a transmission facility identified
15		while testing one or more higher-queued projects being studied in the Independent
16		Study Process, an additional flow test will also be run to ensure that the aggregate
17		impact of these projects is less than five percent.
18		
19		There is also a short circuit test which requires that a generator seeking
20		interconnection under the Independent Study Process cause less than 100 amperes
21		of short circuit contribution on the closest transmission facility impacted by other
22		projects being studied in the interconnection queue. The baseline data used in

1	running both of these tests will be the available power flow and short circuit Base
2	Cases that are being used for the most recent Queue Cluster.
2	

4

Q. Please describe the first step in conducting the flow impact test

5 A. In conducting the flow impact test the ISO, in coordination with the applicable 6 Participating TO(s), will begin by identifying the transmission facility closest, in 7 terms of electrical distance, to the proposed Point of Interconnection of the 8 Generating Facility being tested that will be electrically impacted, either as a 9 result of Network Upgrades already identified or reasonably expected to be 10 needed by Generating Facilities currently being studied in a Queue Cluster, or as a 11 result of Network Upgrades identified or reasonably expected to be needed by 12 earlier-queued Generating Facilities currently being studied through the 13 Independent Study Process. In my testimony, I will refer to this transmission 14 facility as the "impacted" transmission facility.

15

16

17

18

19

20

21

22

23

A.

Q. What if the studies of other generators in the queue, either in clusters or in the Independent Study Process, have not yet identified whether a transmission facility that would be electrically impacted by a generator seeking to enter the Independent Study Process will require upgrades as a result of other generators being studied in the queue? In such cases, the ISO will review other data, such as base case data, to determine whether such data provides enough guidance so that the ISO can reasonably

anticipate whether transmission facilities that will be electrically impacted by the

generators being tested for independence will require upgrades as a result of other generators currently being studied in the ISO's interconnection queue. If the answer is yes, then the ISO will use this data to identify the impacted transmission facility, and run the independence test based on that transmission facility. If not, then the generator being tested for independence must wait until sufficient information exists to make this determination, generally through the completion of studies for other generators in the interconnection queue.

This distinction is necessary because if the ISO were to run the independence test prior to the point at which it has enough information to make this determination, generators that are not truly electrically independent from other projects in the interconnection queue would pass the flow impact test merely because there is no information on the upgrades that might be required as a result of other generators being studied in the interconnection queue. If there is not sufficient information to make a determination as to independence, the ISO will inform the interconnection customer within 15 business days of receiving the interconnection request, at which point the interconnection customer is free to wait until sufficient information exists, or to withdraw its application and enter the ISO interconnection queue through one of the other study processes.

Q. After identifying the impacted transmission facility, what is the next step in the flow impact test?

1	Α.	The next step in the flow impact test is to determine the magnitude of the
2		incremental flow that the generator being tested has on the impacted transmission
3		facility. This will be done by taking the incremental power flow on the impacted
4		transmission facility that is caused by the generator being tested and dividing that
5		number by the lesser of the generator's size or the transmission facility capacity.
6		If the result is five percent or less, the generator will pass the flow impact test.

8

9

10

11

12

13

14

A.

Q. What system conditions will the ISO use when employing this test? Will the ISO account for contingencies?

The ISO will generally conduct the flow impact test assuming normal system conditions with no contingencies modeled. However, if the impacted transmission facility that is serving as the basis for the test requires an upgrade because of a contingency condition, then that contingency will be modeled when conducting the flow impact test.

15

16

Q. Are there any further steps in the flow impact test?

Yes. In addition to the incremental flow impact test that I just described, the ISO will, in certain situations, also conduct an aggregate flow impact test to ensure that generators seeking to interconnect under the Independent Study Process are electrically independent of earlier-queued generators already being studied under the Independent Study Process. Specifically, if the generator being tested for independence is reasonably expected to affect transmission facilities that were identified as the impacted transmission facilities when testing one or more earlier-

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

queued generators currently being studied through the Independent Study Process, than the additional aggregate power flow test will be performed. The aggregate power flow test will be performed against all of the impacted transmission facilities used to test other projects currently being studied in the Independent Study Process that the ISO determines will reasonably be affected by the generator being tested for independence. The aggregate power flow on these facilities caused by all of the applicable generators being studied in the Independent Study Process, as well as the generator being tested, must be five percent or less of the transmission facility's capacity in order to pass this test. However, even if the aggregate power flow on any of the impacted transmission facilities is greater than five percent, if the incremental power flow as a result of the generator being tested is one percent or less of the transmission facilities' capacity, the generator will still pass the aggregate flow test. As with the incremental flow test, the aggregate flow test will model any contingencies that were used to identify the impacted transmission facilities in the first place. Q. Please provide a brief hypothetical example of how this aggregate power flow test will operate. A. Assume three generators, referred to as A, B, and C, have submitted interconnection requests in the Independent Study Process in alphabetical order. The impacted transmission facility identified for Generator A is Line X, and Generator A causes an incremental power flow of less than 5 percent on Line X.

23

2 Process, there is no need for an aggregate flow test, and Generator A therefore 3 passes the flow impact test. 4 5 Generator B then submits its interconnection request. The impacted transmission 6 facility identified for Generator B is Line Y, and the incremental flow caused by 7 Generator B on that line is less than five percent. However, the interconnection of 8 Generator B is reasonably determined to impact Line X as well. Therefore, an 9 aggregate flow test is performed against Line X that takes into account the flow 10 caused on that line by both Generators A and B. The aggregate flow of those two 11 generators on Line X is less than 5 percent, and therefore, Generator B passes the 12 flow impact test. 13 14 Next, Generator C submits its interconnection request. The impacted 15 transmission facility identified for Generator C is Line Z, and the incremental 16 flow caused by Generator C on Line Z is less than five percent. It is reasonably 17 determined, however, that Generator C will impact both Lines X and Y as well. 18 Therefore, an aggregate flow test is performed against both Lines X and Y that 19 takes into account the aggregate flow on these lines caused by Generators A, B, 20 and C. The aggregate flow of these three generators on Line X is below five 21 percent, but for Line Y, it is above five percent. However, Generator C's 22 incremental flow on Line Y is less than one percent of Line Y's capacity.

Therefore, even though the aggregate impact of Generators A, B, and C on Line Y

Because no other generators are currently being studied in the Independent Study

is greater than five percent, the fact that Generator C's individual impact on Line Y is one percent or less of Line Y's capacity means that Generator C passes the flow impact test. If, however, Generator C had had an incremental flow greater than one percent on Line Y, it would have failed the flow impact test.

5

6

7

8

9

1

2

3

4

Q. Please describe the short circuit test.

A. In addition to the flow impact test, the ISO will test the short circuit contribution from the generator being tested at the impacted transmission facility. If the short circuit contribution from the generator being tested is less than 100 amperes, the generator will pass the short circuit test.

11

12

13

14

10

Q. Has the ISO conducted any analysis to determine whether or not projects in the ISO's interconnection queue would realistically be able to pass the independence test under the criteria proposed by the ISO?

15 A. Yes. Using the methodology I have described herein, the ISO tested a sample of 16 thirty-two small generator projects in the ISO's interconnection queue to 17 determine whether they would be considered independent of generators currently 18 being studied in Cluster 1 of the ISO's LGIP. Seventeen of these thirty-two 19 projects passed the flow impact test. Of these seventeen projects, eight projects 20 passed the short circuit duty test, and therefore would be considered independent 21 of other projects being studied in the ISO's interconnection queue. Therefore, 22 from this sample of thirty-two projects, 25 percent would be eligible to be studied 23 under the Independent Study Process, assuming they were able to meet the other

19

20

21

22

23

1 eligibility criteria in addition to electrical independence. I believe this 2 demonstrates that the independence test developed by the ISO and stakeholders is 3 a reasonable objective test for determining which generators can be fairly and 4 efficiently studied separately from other generators in the ISO's interconnection 5 queue. 6 7 **Additional Deliverability Assessments Options** 8 Q. Please summarize the additional deliverability assessment options that the 9 ISO proposes to provide under the GIP. 10 A. The ISO proposes to provide the option for generators that were previously 11 studied as Energy-Only, as well as Small Generating Facilities studied under the 12 SGIP, to be studied for Full Capacity Deliverability Status, either under a one-13 time or an annual process. This process will permit these generators to obtain 14 Full Capacity Deliverability Status that would be otherwise unavailable to them. 15 16 Q. What are the features of the one-time Full Capacity Deliverability option? 17 A. This option will allow large generators that were previously studied as Energy-

Only, as well as generators studied under the SGIP, a one-time opportunity to

obtain Full Capacity Deliverability Status in essentially the same manner as

projects electing Full Capacity Deliverability Status in the ISO's current LGIP

process. Such generators that wish to take advantage of this option must make

Cluster, which will open on March 1, 2011. Those that do so will be studied as

their elections within the Cluster Application Window for the ISO's fourth Queue

part of the Phase I and Phase II Interconnection Studies for the ISO's fourth

Queue Cluster. The determination and allocation of costs relating to any delivery
network upgrades identified as part of this process will be done pursuant to the
standard provisions of the GIP.

5

6

7

8

9

10

11

12

13

1

2

3

4

Q. Why is the ISO providing this one-time option?

A. Because of the increased emphasis on generator deliverability in the past several years, particularly in light of the resource adequacy initiatives, the ISO believes that it is appropriate to provide generators that were not studied for Full Capacity Deliverability Status in the interconnection process with a one-time opportunity to obtain that service. This is particularly true for small generator customers, who, under the SGIP, never had the option of being studied for Full Capacity Deliverability Status.

14

15

Q. What are the features of the annual Full Capacity deliverability option?

16 A. The annual Full Capacity Deliverability option provides generators that were 17 previously studied as Energy-Only, or were studied under the provisions of the 18 ISO's SGIP, with the ability to be studied to determine if they can be designated 19 as Full Capacity Deliverability Status resources using available transmission 20 capability remaining after the conclusion of each Phase II cluster study. An 21 Interconnection Customer must make such request, along with a non-refundable 22 \$10,000 study fee, within a Cluster Application Window, beginning with the 23 Cluster Application Window for the ISO's fifth Queue Cluster, which will open

1		on March 1, 2012. Any Interconnection Customer selecting this option will be
2		studied immediately following the Phase II Interconnection Studies associated
3		with the Queue Cluster during which the Interconnection Customer submits its
4		request.
5		
6	Q.	How did the ISO determine the amount of the study fee required to perform
7		this assessment?
8	A.	The ISO reviewed several different options during the development of the GIP
9		proposal and determined that \$10,000 represented a reasonable average of the
10		costs associated with analyzing the ISO Controlled Grid to determine what
11		available transmission capability could be used to provide eligible generators with
12		deliverability.
13		
14	Q.	How will the ISO provide available transmission capability to customers
15		requesting an annual Full Capacity deliverability assessment?
16	A.	After allocating transmission system capability to Interconnection Customers in
17		the Queue Cluster who originally requested Full Capacity in the Phase II
18		interconnection study, the ISO will perform additional studies for customers
19		requesting an annual Full Capacity Deliverability assessment using the
20		deliverability study procedures set forth in Section 6.5.2 of the GIP to determine
21		the availability of any remaining transmission system capability.

1		In determining available transmission capability, priority will be given to
2		Interconnection Customers whose generators have the lowest transfer distribution
3		factors on the transmission constraint that is limiting deliverability, calculated
4		according to the deliverability study procedures set forth in Section 6.5.2 of the
5		GIP. If there is sufficient available transmission capability for the Interconnection
6		Customer to deliver the full output of its generator, then the Interconnection
7		Customer's generator will be considered to have Full Capacity Deliverability
8		Status.
9		
10	Q.	Why is the ISO proposing to provide available transmission capability based
11		on the lowest transfer distribution factors?
12	A.	Providing deliverability priority to generators with the lowest transfer distribution
13		factors on the transmission constraint that is limiting the deliverability of the
14		generators will result in creating the maximum amount of available generation
15		capacity available for generator owners to offer to load serving entities to meet
16		their resource adequacy planning needs, thereby maximizing the efficient use of
17		the transmission system.
18		
19	Q.	What if the ISO's studies indicate that there is some transmission capability
20		available for use by a customer, but not enough to provide Full Capacity
21		Deliverability Status?
22	A.	In such circumstances, the ISO will treat the capacity from the generator at issue
23		to be partially deliverable. However, the ISO will include a deliverability margin

when a customer is determined to be only partially deliverable. More specifically, the ISO will make available to such a customer the amount of transmission deliverability equal to the determination of available capacity for the generator rounded down to the nearest 50 MW increment. For example, if a 60 MW generating facility requests Full Capacity Deliverability Status in the annual assessment process, and the ISO determines that 55 MW of transmission deliverability is available to that facility, the ISO will provide 50 MW of transmission deliverability for purposes of determining the generator's deliverable capacity.

A.

Q. Why is the ISO proposing to allocate partial deliverability in 50 MW

increments?

In answering this question, it is important to recognize that all generators on the ISO Controlled Grid will have the option to obtain Full Capacity Deliverability Status, utilizing the existing capability of the transmission system along with any necessary upgrades, through the standard interconnection study process, as well as the one-time Full Capacity Deliverability option. The annual deliverability option is not designed as a replacement for these processes, but rather, as a means by which the ISO can promote the fairest and most efficient use of the transmission system by offering excess transmission capability to generators on an "as is" basis.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

An important element of ensuring the fairest and most efficient use of the transmission system is retaining sufficient "headroom" on the system, so that the deliverability of generators that have already obtained deliverability designations is minimally impacted by subsequent new generation capacity additions. If the ISO was to make all transmission capability available to generators through partial deliverability designations, the ISO's flow models will show that transmission constraints are at 100 percent of their limits. As a result, when the ISO conducts its annual deliverability assessments to determine the net qualifying capacity of generators, it is very likely that even small incremental changes in load growth and transmission expansion (which are common) will require reductions to numerous generators' net qualifying capacity. Although the ISO recognizes that some changes to net qualifying capacity are acceptable, the ISO believes that frequent reductions to numerous generators' net qualifying capacity will be disruptive to both generators and load serving entities, because a generator's net qualifying capacity is a key element of many of the commercial arrangements and contracts underlying the resource adequacy and RPS regimes. Moreover, if the ISO was to allocate all of the available capability as part of this annual process, generators electing to be studied as Full Capacity Deliverability projects with very small flow impacts (less than five percent) on electrically

distant lines loaded to 100 percent would require reductions in deliverability to

deliverability procedures do not require generators with flow impacts of less than

generators electrically close to those constraints. This is because ISO

9	A.	Yes.
8	Q.	Does this conclude your testimony?
7		
6		in the annual process on the basis of 50 MW increments.
5		sufficient headroom on the ISO Controlled Grid is to allocate partial deliverability
4		for Full Capacity Deliverability Status in the annual process and retaining
3		balance between providing some deliverability to generators that do not qualify
2		upgrades on that constraint. For these reasons, the ISO believes that the best
1		five percent of the generators' output on a transmission constraint to pay for

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge.

Executed on October 18, 2010.

Robert Sparks

Attachment E – Table Summarizing Key Dates in GIP Stakeholder Process

Generator Interconnection Procedures Tariff Amendment

California Independent System Operator Corporation

Key Dates in Generator Interconnection Procedures Stakeholder Process

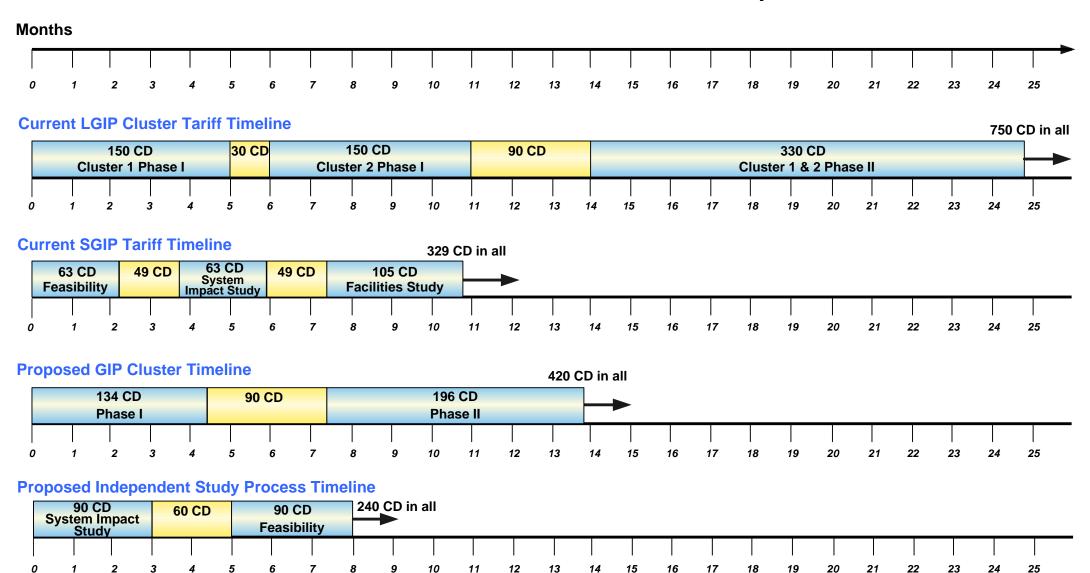
Materials provided by the ISO and stakeholders in the stakeholder process are available on the ISO's website at http://www.caiso.com/275e/275ed48c685e0.html. Materials provided to the ISO Governing Board and the Board's decision on the Generator Interconnection Procedures are available on the ISO's website at http://www.caiso.com/2804/2804cca31d3a0.html.

Date	Event/Due Date
April 1, 2010	ISO issues document entitled "Modifications to the Small
	Generator Interconnection Procedures Issues Paper" for
	discussion at April 12, 2010 meeting
April 12, 2010	ISO hosts stakeholder meeting that includes ISO
	presentation entitled "Modifications to the Small Generator
	Interconnection Procedures"
April 27, 2010	Due date for written stakeholder comments on matters
	discussed at April 12 stakeholder meeting
April 29, 2010	First meeting of working group to discuss issues related to
	generator interconnection
May 14, 2010	Second meeting of working group to discuss issues
	related to generator interconnection
May 26, 2010	ISO issues document entitled "Generator Interconnection
	Procedures Straw Proposal" for discussion at June 3,
	2010 meeting
June 3, 2010	ISO hosts stakeholder meeting that includes ISO
	presentation entitled "Modifications to Both the Small and
	Large Generator Interconnection Procedures"
June 21, 2010	Due date for written stakeholder comments on matters
	discussed at June 3 meeting
June 25, 2010	Third meeting of working group to discuss issues related
	to generator interconnection
July 8, 2010	Fourth meeting of working group to discuss issues related
	to generator interconnection
July 20, 2010	ISO issues document entitled "Generator Interconnection
	Procedures Draft Final Proposal" for discussion at July 27,
	2010 meeting
July 27, 2010	ISO hosts stakeholder meeting that includes ISO
	presentation entitled "Small and Large Generator
	Interconnection Procedures"
August 3, 2010	Due date for written stakeholder comments on matters
	discussed at July 27 meeting
August 13, 2010	ISO issues document entitled "Generator Interconnection
	Procedures Draft Final Proposal Addendum" for

Date	Event/Due Date
	discussion at August 20 meeting
August 20, 2010	ISO hosts stakeholder conference call to discuss the
	addendum document posted on August 13, 2010
September 9, 2010	ISO Governing Board authorizes the ISO to file tariff
	amendment to implement Generator Interconnection
	Procedures
September 29, 2010	ISO issues draft tariff language to implement Generator
	Interconnection Procedures for stakeholder review and
	comment
October 6, 2010	Due date for written stakeholder comments on draft tariff
	language
October 12, 2010	ISO posts written responses to stakeholder comments;
	ISO hosts stakeholder conference call to discuss draft
	tariff language
October 19, 2010	ISO files tariff amendment to implement Generator
	Interconnection Procedures

Attachment F – Current LGIP and Revised GIP Study Timelines
Generator Interconnection Procedures Tariff Amendment
California Independent System Operator Corporation

Interconnection Procedures Tariff Timeline Comparison



Note: All procedures also include interconnection request validation and scoping meetings, which are not reflected in the chart.

Attachment G -

Marked Tariff of Section 5 Fast Track Process blacklined against Appendix S

Generator Interconnection Procedures Tariff Amendment

California Independent System Operator Corporation

Section 5 Fast Track Process [Note FAST Track proposal as shown in the blacklined Appendix Y as compared with the original Fast Track of Appendix S]

25.1 ___Applicability

The and Initiation of Fast Track Process is available to an Request

An Interconnection Customer proposing to interconnect its Small-may request interconnection of a proposed Generating Facility withto the CAISO Controlled Grid ifunder the Small-Fast Track Process if the Generating Facility is no larger than 25 MW and if the Interconnection Customer's proposed Small-Generating Facility meets the codes, standards, and certification requirements of Attachments 3Appendices 96 and 104 of these procedures this GIP, or if the applicable Participating TO notifies the CAISO that it has reviewed the design for or tested the proposed Small Generating Facility and is satisfied that it is safe to operate has determined that the proposed Generating Facility may linterconnect consistent with Reliability Criteria and Good Utility Practice.

22

<u>To initiate an Interconnection Request under the Fast Track Process, the Interconnection Customer must provide the CAISO with:</u>

- (i) a completed Interconnection Request as set forth in Appendix 1 to the GIP;
- (ii) a non-refundable processing fee of \$500 and a study deposit of \$1,000; and
- (iii) a demonstration of Site Exclusivity. For the Fast Track Process, such demonstration may include documentation reasonably demonstrating a right to locate the Generating Facility on real estate or real property improvements owned, leased, or otherwise legally held by another.

The CAISO shall review and validate the Fast Track Process Interconnection Request pursuant to GIP Section 5.2.

All provisions of this GIP will apply unless superseded by provisions in this GIP Section 5.

5.2 Initial Review

Within <u>fifteen (15)</u> Business Days after the CAISO notifies the Interconnection Customer <u>that it has received a the Interconnection Request is deemed</u> complete <u>Interconnection Request, valid, and ready to be studied</u>, the applicable Participating TO shall perform an initial review using the screens set forth <u>in GIP Section 5.3</u> below, shall notify the Interconnection Customer of the results, and <u>shall</u> include with the notification copies of the analysis and data underlying the Participating TO's determinations under the screens.

2.2.1 <u>5.3</u> Screens

- 2.25.3.1.1 The proposed Small Generating Facility must pass the following screens to be eligible for Interconnection under this Fast Track Process:
- 5.3.1.1 The proposed Generating Facility's Point of Interconnection must be on a portion of the Participating TO's Distribution System that is subject to the CAISO TariffControlled Grid.

- For interconnection of a proposed Small-Generating Facility to a radial distribution transmission circuit, the aggregated generation on the circuit, including the proposed Small-Generating Facility, on the circuit shall not exceed 15% percent of the line section annual peak load as most recently measured at the substation.—A For purposes of this GIP Section 5.3.1.2, a line section is shall be considered as that portion of a Participating TO's electric system connected to a customer bounded by automatic sectionalizing devices or the end of the distribution transmission line.
- For interconnection of a proposed Small-Generating Facility to the load side of spot network protectors, the proposed-Small Generating Facility must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of 5% percent of a spot network's maximum load or 50 kW. For purposes of this GIP Section 5.3.1.3, a spot network shall be considered as a type of distribution system found in modern commercial buildings for the purpose of providing high reliability of service to a single retail customer.

[footnote 1: A spot Network is a type of distribution system found within modern commercial buildings to provide high reliability of service to a single customer. (Standard Handbook for Electrical Engineers, 11th-edition, Donald Fink, McGraw Hill Book Company)]

- The proposed Small-Generating Facility, in aggregation with other generation on the distributiontransmission circuit, shall not contribute more than 10% percent to the distributiontransmission circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of change of ownership.
- The proposed Small-Generating Facility, in aggregate with other generation on the distribution transmission circuit, shall not cause any distribution transmission protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or Interconnection Customer equipment on the system to exceed 87.5% percent of the short circuit interrupting capability; nor shall the interconnection proposed for a circuit that already exceeds 87.5% percent of the short circuit interrupting capability.
 - 2.2.1.6

 Using the table below, determine the type of interconnection to a primary distribution line. This screen includes a review of the type of electrical service provided to the Interconnecting Customer, including line configuration and the transformer connection to limit the potential for creating over-voltages on the Participating TO's electric power system due to a loss of ground during the operating time of any anti-islanding function.

Primary Distribution Line Type	Type of Interconnection to Primary Distribution Line	
		Result/Criteria
Three-phase, three wire	3-phase or single phase, phase-to- phase	Pass screen
Three-phase, four wire	Effectively-grounded 3 phase or Single-phase, line-to-neutral	Pass screen

- 2.2.1.7 If the proposed Small Generating Facility is to be interconnected on single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed Small Generating Facility, shall not exceed 20 kW.
- 2.2.1.8 If the proposed Small Generating Facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20% of the nameplate rating of the service transformer.

2.2.1.9 The Small

- 5.3.1.6 The Generating Facility, in aggregate with other generation interconnected to the transmission side of a substation transformer feeding the circuit where the Small Generating Facility proposes to interconnect shall not exceed 10 MW in an area where there are known, or posted, transient stability limitations to generating units located in the general electrical vicinity (e.g., three or four transmission busses from the pointPoint of interconnectionInterconnection).
 - 2.2.1.10 No construction of facilities by the Participating TO on its own system shall be required to accommodate the Small Generating Facility.
- 2.2.2
- If the proposed interconnection passes the screens, and no Upgrades are reasonably anticipated, the Interconnection Request shall be approved and.

 Within fifteen (15) Business Days thereafter, the Participating TO will provide the Interconnection Customer an executable interconnection agreement within five Business Days after the determination with a Small Generator Interconnection Agreement for execution.
- 2.25.3-.3

 If the proposed interconnection fails the screens and no Upgrades are reasonably anticipated, but the CAISO and Participating TO determines that the Small-Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards under these procedures, the Participating TO shall, within fifteen (15) -Business Days, provide the Interconnection Customer with an executable interconnection agreement within five Business Days after the determinationSmall Generator Interconnection Agreement for execution.
- 2.25.3.4 If the proposed interconnection passes the screens and Upgrades are reasonably anticipated the proposed interconnection fails the screens, but the Participating TO does not or cannot determine from the initial review that the Small Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards unless the Interconnection Customer is willing to consider minor modifications or further study, the CAISO and Participating TO shall provide the Interconnection Customer with the opportunity to attend a customer options meeting as described in GIP Section 5.4.

2.3.5.4 Customer Options Meeting

If the <u>CAISO and</u> Participating TO determines the Interconnection Request cannot be approved without minor modifications at minimal cost; or a supplemental study or other additional studies or actions; or at significant cost to address safety, reliability, or power quality problems, within the

five (5) Business Day period after the determination, the <u>CAISO and</u> Participating TO shall notify the Interconnection Customer and provide copies of all data and analyses underlying its conclusion. Within ten (10) Business Days of the <u>CAISO and</u> Participating TO's determination, the <u>CAISO and</u> Participating TO shall offer to convene a customer options meeting with the <u>CAISO and</u> Participating TO to review possible Interconnection Customer facility modifications or the screen analysis and related results, to determine what further steps are needed to permit the Small Generating Facility to be connected safely and reliably. At the time of notification of the <u>CAISO and</u> Participating TO's determination, or at the customer options meeting, the <u>CAISO and</u> Participating TO shall:

- 2.35.4.1- Offer to perform facility modifications or minor modifications to the Participating TO's electric system (e.g., changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the limited cost to make such modifications to the Participating TO's electric system; or
- 5.4.2.3.2 Offer to perform a supplemental review if the <u>CAISO and Participating TO concludes that the supplemental review might determine that the <u>Small Generating Facility could continue to qualify for interconnection pursuant to the Fast Track Process, and provide a non-binding good faith estimate of the costs of such review; or</u></u>
- 2<u>5.4</u>.3.3 Obtain the Interconnection Customer's agreement to continue evaluating the Interconnection Request under the SGIP Section 3 Independent Study Process or Cluster Study Process.

2.4-5.5 Supplemental Review

If the Interconnection Customer agrees to a supplemental review, the Interconnection Customer shall agree in writing within fifteen (15) Business Days of the offer, and submit a deposit for the estimated costs- in an amount reasonably determined by the CAISO and Participating TO. The Interconnection Customer shall be responsible for the CAISO and Participating TO's actual costs for conducting the supplemental review. The Interconnection Customer must pay any review costs that exceed the deposit within twenty (20) Business Days of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced costs, the CAISO and Participating TO will return such excess, without interest, within twenty (20) Business Days of the invoice without interest.

- 2.45.5.1- Within ten (10) Business Days following receipt of the deposit for a supplemental review, the <u>CAISO and</u> Participating TO will determine if the Small Generating Facility can be interconnected safely and reliably.
- 2.4<u>5.5.1.1</u>

 If so, then, within five (5) fifteen (15) Business Days of such a determination, the Participating TO shall forward an executable an interconnection agreement Small Generator Interconnection Agreement to the Interconnection Customer within five Business Daysfor execution.
- If so, and Interconnection Customer facility modifications are required to allow the Small Generating Facility to be interconnected consistent with safety, reliability, and power quality standards under these procedures, the Participating TO shall forward an executable interconnection agreement Small Generator Interconnection Agreement to the Interconnection Customer for execution within five fifteen (15) Business Days after confirmation that the Interconnection Customer has agreed to makepay for the necessary changes atidentified modifications to the Interconnection Customer's costParticipating TO's electric system.

- If so, and minor modifications <u>Upgrades</u> to the Participating TO's electric system are required to allow the Small Generating Facility to be interconnected consistent with safety, reliability, and power quality standards <u>under the Fast Track Process</u>, the Participating TO shall forward an <u>executable interconnection agreement Small Generator Interconnection Agreement for execution</u> to the Interconnection Customer <u>for execution</u> within <u>ten-fifteen (15)</u> Business Days that requires the Interconnection Customer to pay the costs of such system modifications prior to interconnection.
- 5.5.2.4.1.4 If not, the Interconnection Request will continue be deemed withdrawn, without prejudice to be evaluated the Interconnection Customer resubmitting its Interconnection Request for processing in either a Queue Cluster or under the SGIP Section 3 Independent Study Process.

* * *