



November 30, 2011

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. ER12- -000

GIP Phase 2 Tariff Amendment to Revise Generator Interconnection Procedures

Dear Secretary Bose:

The California Independent System Operator Corporation ("CAISO")¹ hereby submits proposed modifications to its tariff pursuant to its Generator Interconnection Procedures Phase 2 ("GIP Phase 2") stakeholder effort. GIP Phase 2 is a continuation of the 2010 stakeholder effort that culminated in the harmonization of the CAISO's small and large generator interconnection procedures into a single process through tariff revisions accepted by the Commission in December 2010 in Docket No. ER11-1830.²

GIP Phase 2 encompasses 18 different items regarding modifications to the generator interconnection procedures and related *pro forma* generator interconnection agreements set forth in the CAISO Tariff. All of these modifications represent improvements to the CAISO's interconnection process and most enjoy broad stakeholder support. The CAISO requests that the Commission accept these tariff changes effective 62 days after the date of this filing, *i.e.*, January 31, 2012.

I. Background

GIP Phase 2 continues the efforts begun in the 2010 stakeholder process that led up to the filing of the CAISO's harmonized Generator Interconnection Procedures and *pro forma* agreements for interconnection of small and large

The CAISO submits this filing pursuant to Section 205 of the Federal Power Act, 16 U.S.C. § 824d. Capitalized terms not otherwise defined herein have the meanings set forth in Appendix A of the CAISO tariff.

The tariff revisions accepted in Docket No. ER11-1830 were submitted pursuant to the Generator Interconnection Procedures ("GIP") proceeding (sometimes also referred to as the original GIP proceeding or GIP Phase 1). See California Independent System Operator Corp., 133 FERC ¶ 61,223 (2010); Commission Letter Order, Docket No. ER11-1830-001 (Mar. 28, 2011) (accepting CAISO compliance filing in GIP Phase 1).

generators to the CAISO controlled grid.³ Under GIP Phase 1, the CAISO incorporated processes to interconnect all generators, regardless of size, pursuant to a single interconnection procedure (contained in CAISO Tariff Appendix Y) under which the primary study method is the cluster study process.⁴

GIP Phase 2 addresses certain carryover issues identified in the original GIP stakeholder process and other issues identified as the GIP Phase 2 process unfolded. These include issues relating to generator technical specifications, information accessibility, incorporating previously non-conforming large generator interconnection agreement provisions, study assessment methodology, and financial security posting requirements.

Sources of the specific GIP Phase 2 design components

The 18 specific issues addressed in this filing emanate from four sources:

1) Carry-over from GIP Phase 1. First, in the course of the GIP Phase 1 stakeholder process, the CAISO and stakeholders identified additional issues that warranted further consideration but could not be addressed at that time. In particular, in the GIP Phase 1 Draft Final Proposal, the CAISO explained that it would address, in a future stakeholder process, a number of issues raised during the GIP Phase 1 stakeholder process that could not then be addressed without jeopardizing the CAISO's ability to implement GIP Phase 1

The GIP is contained in Appendix Y to the CAISO tariff. In the instant tariff amendment, the CAISO proposes to revise the GIP, the *pro forma* Small Generator Interconnection Agreement ("SGIA") contained in Appendix T to the CAISO tariff, the *pro forma* Large Generator Interconnection Agreement for interconnection requests in a queue cluster window contained in Appendix CC to the CAISO tariff, and certain provisions in the body of the CAISO tariff.

Information on the CAISO's GIP Phase 1 stakeholder effort can be found on the CAISO's website at

http://www.caiso.com/informed/Pages/StakeholderProcesses/CompletedStakeholderProcesses/SmallandLargeGeneratorInterconnectionProcedures.aspx. The webpage title contains the original name of the stakeholder effort, "Small and large generator interconnection procedures" which was renamed "GIP" and then restyled as "GIP Phase 1" to distinguish it from the 2011 "GIP Phase 2" effort which is the subject of this filing.

within a reasonable timeframe.⁵ A number of issues addressed in this filing fall into this category.⁶

- 2) CAISO's 2010 Revised Transmission Planning Process filing. The CAISO's revised transmission planning process ("RTPP") (filed with the Commission in June 2010 and conditionally accepted by the Commission on December 16, 2010)⁷ included provisions that further increase the level of integration between the CAISO's generator interconnection and transmission planning processes, and also identified and deferred some interconnection policy issues for resolution in the GIP Phase 2 initiative.⁸
- 3) <u>Issues arising from LGIA negotiations</u>. During the course of several LGIA negotiations that have taken place over the past year, the CAISO and the other parties to these large generator interconnection agreements ("LGIA") have negotiated nonconforming provisions to address issues related to the construction of generation projects in multiple phases. Based on its experience in negotiating and filing these LGIAs, the CAISO determined that several permanent modifications to the CAISO's interconnection procedures and agreements should be considered as part of the GIP Phase 2 stakeholder process.
- 4) <u>Issues that arose during this stakeholder effort</u>. Through working group meetings with stakeholders and comments that stakeholders submitted responding to the original GIP Phase 2 issue paper, the CAISO included several additional topics within the GIP Phase 2 stakeholder process.

GIP Phase 1 Draft Final Proposal at 43-44 (July 20, 2010), available on the CAISO website at http://www.caiso.com/27d9/27d91299c74670.pdf. One of the driving forces for implementing GIP Phase 1 before the end of 2010 was the need to transition certain small generators from the serial small generator interconnection process to the new cluster study approach and to minimize the number of ever-increasing interconnection requests that would remain subject to serial study, which the stakeholder process had identified as increasingly inefficient in the circumstances of accelerated renewable portfolio standard ("RPS") procurement activities within the state.

The CAISO anticipates that it will conduct another stakeholder process (GIP Phase 3) to address additional issues that could not be resolved in GIP Phase 2. The CAISO anticipates that the GIP Phase 3 stakeholder process will begin in the first quarter of 2012. To the extent necessary, the CAISO will file a further tariff amendment to implement the changes that result from the GIP Phase 3 stakeholder process.

See California Independent System Operator, Corp., 133 FERC ¶ 61,224 (2010).

In addition, the CAISO has initiated a separate stakeholder initiative to address the need for greater coordination between generator interconnection and transmission planning. Materials related to this separate stakeholder process are available on the CAISO website at http://www.caiso.com/informed/Pages/StakeholderProcesses/TransmissionPlanning_GenerationInterconnectionIntegration.aspx.

Comprehensive stakeholder process

The CAISO and stakeholders have conducted a robust stakeholder process over the past several months in order to develop the eighteen GIP Phase 2 tariff modifications contained in this filing. More details regarding the stakeholder efforts are discussed below, in Section III of this transmittal letter. The CAISO Governing Board authorized the preparation and filing of this tariff amendment at its August 25 2011 meeting.⁹

As more fully explained below, all of these proposed modifications are just and reasonable because implementing them will improve the fairness and efficiency of the CAISO's generator interconnection process. In particular, the benefits proposed modifications in this GIP Phase 2 amendment include:

- Greater flexibility and certainty for interconnection customers as projects move through the process;
- Enhanced interconnection customer repayment provisions for phased generating facilities;
- Additional interconnection customer flexibility when outside conditions compel requests to reduce generation project size;
- More streamlined interconnection processes for smaller resources, repowered resources, and conversions of qualifying facilities to participating generators, which removes the need for full interconnection study cycle participation when making certain changes or incremental additions:
- Greater administrative coordination to present interconnection customers with clearer interconnection cost and financial security information;
- Incorporated Participating TO presumptive cost recovery eligibility through the mechanism of the rate based transmission access charge ("TAC") when the CAISO's tariff requires Participating TOs to assume cost responsibility to build transmission; and
- New partial deliverability and interim deliverability options for generation projects.

The CAISO stakeholder initiative webpage for the GIP Phase 2 stakeholder process can be accessed at http://www.caiso.com/informed/Pages/StakeholderProcesses/GenerationInterconnectionProceduresPhase2.aspx.

II. Proposed Tariff Changes in the GIP Phase 2 Amendment

The tariff revisions contained in this GIP Phase 2 amendment filing address 18 separate items that were thoroughly discussed in the GIP Phase 2 stakeholder process and, based on that discussion, submitted and approved by the CAISO Governing Board for filing with the Commission.

These 18 items, along with the tariff sections that they affect, are listed in the "Table of GIP Phase 2 Changes" included as <u>Attachment C</u> to this filing. In addition, the 18 items are addressed in a number of documents posted on the CAISO website. In particular, the 18 items are discussed in detail in the GIP Phase 2 Revised Draft Final Proposal issued on June 30, 2011 ("Revised Draft Final Proposal"), as modified by an Addendum to the Revised Draft Final Proposal issued on July 22, 2011 ("Addendum").¹⁰

Each of these 18 items is discussed individually below (as items A through R).

A. Item #1: Generators Interconnecting to Non-PTO Facilities Situated Inside the CAISO Balancing Authority Area

The paradigm of the GIP is generator interconnection *directly* to the CAISO controlled grid. However, in the GIP Phase 2 stakeholder process, the CAISO and stakeholders recognized a slightly different situation: one in which a party wishes to

- i) interconnect generation to the transmission facilities of a non-Participating Transmission Owner entity which is located *inside* the ISO Balancing Authority Area and
- ii) also desires to obtain *full capacity deliverability status* for the purpose of providing resource adequacy capacity to an CAISO load serving entity.¹¹

To accommodate this situation, the GIP Phase 2 amendment adds a new Section 8.4 to the GIP, to provide the CAISO with authority similar to that which the CAISO already has to study projects for full capacity deliverability status to the CAISO's system when those projects interconnect *under a participating*

The Revised Draft Final Proposal is provided as <u>Attachment D</u> to this tariff amendment, and the Addendum is provided as <u>Attachment E</u> to this tariff amendment. The 18 items are also discussed in a memorandum sent by Keith Casey, Vice President, Market & Infrastructure Development for the CAISO, to the CAISO Governing Board on August 18, 2011 ("Board Memorandum"). The Board Memorandum is provided as <u>Attachment F</u> to this tariff amendment.

Revised Draft Final Proposal at 20-21 (Section 7.2.2); Addendum #7 to Revised Draft Final Proposal.

transmission owner's tariff (such as a wholesale distribution access tariff) that provides the option for full capacity deliverability status. 12

Including this provision in the CAISO Tariff will provide benefits to the entire market because generation developers will have greater flexibility in choosing their points of interconnection in the CAISO's Balancing Authority Area, which will make those projects more economically viable and ultimately lead to the deployment of a greater amount of capacity to serve load on the CAISO system and fulfill state RPS policy goals. No parties in the GIP Phase 2 stakeholder process objected to this proposal.

The CAISO's GIP Phase 2 Tariff amendment includes GIP Section 8.4, which sets forth a process for generating facilities that interconnect to the transmission facilities of a Non-Participating TO located within the CAISO Balancing Authority Area that wish to obtain full capacity deliverability status under the CAISO Tariff. ¹³ Under Section 8.4, the CAISO will study these generating facilities for full capacity deliverability status under the following provisions:

- (a) The generating facility must submit an interconnection request to the CAISO to have the CAISO study the project for full capacity deliverability status. The interconnection request, must include the generating facility's intended point of delivery to the CAISO controlled grid, and must be submitted during a cluster application window. The generating facility will be required to satisfy the same study deposit and interconnection financial security posting requirements as an interconnection customer, but will not be considered an interconnection customer under the CAISO Tariff.
- (b) The Non-Participating TO that serves as the interconnection provider to the generating facility must treat the CAISO as an affected system in its interconnection study process for the generating facility.
- (c) As part of the Non-Participating TO's interconnection study process, the CAISO, in its sole discretion and on a case-by-case basis, will determine the adequacy of transmission on the Non-Participating TO's system for the generating facility to be deemed fully deliverable to the elected point of delivery to the CAISO controlled grid. Only those customers for which the CAISO has determined there is adequate transmission capacity on the Non-Participating TO system to provide full deliverability to the

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See GIP Section 8.3.

In general, interconnection customers elect this status for the purpose of supplying Resource Adequacy capacity to a load serving entity.

- applicable point of delivery will be eligible to be assessed for full capacity deliverability status under the CAISO Tariff.
- (d) If the generating facility is eligible for study for full capacity deliverability status, the CAISO will include the generating facility in the interconnection study process for the queue cluster associated with the cluster application window in which the generating facility has submitted its study request. The point of delivery with the CAISO will be treated as the point of interconnection for purposes of including the generating facility in a group study with any applicable CAISO interconnection customers in the relevant queue cluster. Pursuant to the queue cluster interconnection study process, as set forth in the GIP, the generating facility will be allocated its share of any applicable delivery network upgrades.
- (e) The CAISO, customer and Participating TO 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 each such interconnection customer under the non-Participating TO's tariff.
- (f) The non-Participating TO's interconnection customer will receive repayment of funds posted for the construction of the delivery network upgrades on the CAISO controlled grid in the same manner as CAISO interconnection customers.

B. Item #2: Trigger for Interconnection Financial Security Posting Deadlines

In the GIP Phase 2 stakeholder process, the CAISO and stakeholders determined that the provisions in the GIP regarding the Phase I and Phase II interconnection study reports should be modified to

- provide greater specificity as to opportunities for interconnection customers to provide comments on the Phase I and Phase II reports,
- (ii) memorialize within the tariff a clear process for issuing revisions and addenda to the reports, and
- (iii) give interconnection customers greater specificity about when a change to the study report would be considered substantial enough

to warrant providing the customer more time to post the interconnection financial security.¹⁴

These changes provide in greater clarity to the CAISO's interconnection process, in particular, as to when a study report change triggers additional time for the interconnection financial security posting deadlines. The GIP Phase 2 amendment revises several sections in the GIP to make these modifications.

Process for interconnection customer to comment on the Phase I and Phase II reports. Additional language in GIP Section 6.9 now provides an opportunity for the interconnection customer to provide written comments on the final Phase I interconnection study report within ten (10) business days of receipt of the report, but in no event less than three (3) business days before the Phase I results meeting conducted to discuss the report, whichever is sooner. These comments will be addressed in the Phase I interconnection study results meeting.

Revisions to GIP Section 6.9 state that in the Phase I interconnection study results meeting, the applicable Participating TO(s) and the CAISO shall address any written comments made by the interconnection customer on the final Phase I interconnection study report pursuant to GIP Section 6.9.

Further, new language in Section 6.9 states that the interconnection customer may submit, in writing, additional comments on the final Phase I interconnection study report up to 3 business days after the results meeting has been held.

Handling changes to a study through one of two mechanisms: either a revision or an addendum. New language in Section 6.9 states that, based on any discussion at the results meeting and any comments received, the CAISO and applicable Participating TO(s) will determine, in accordance with Section 6.10 of the GIP, whether it is necessary to revise or issue an addendum to the final Phase I interconnection study report. Changes that rise to the level of substantial error (described in Section 6.10) will cause the CAISO and applicable Participating TO(s) to revise the final Phase I interconnection study report and only through a revised study report (not through the other mechanism of a study addendum). The CAISO will issue the revised report no later than 15 business days after the results meeting.

GIP Phase 2 amendment additions to Sections 7.5 and 7.7 of the GIP establish mirrored procedures for the Phase II interconnection study report and Phase II interconnection study report results meeting.

Revised Draft Final Proposal at 21-26 (Section 7.2.3) and Addendum #8.

Specifying that only substantial error triggers a revised report and only a revised report can trigger more time for the applicable interconnection financial security posting that follows the study. The CAISO has added new Section 6.10 to the GIP, and created two types of documents to address potential changes to a final interconnection study report: (1) the revision and (2) the addendum, for the purpose of differentiating between those substantial changes to a study report that affect the timeframe for financial security postings, and those that do not.

<u>Defining what is a substantial error/omission</u>, Per GIP Section 6.10.1, the CAISO will issue a revised final study report *only when an error or omission in that report is "substantial" in nature*. A *substantial error or omission* is defined as an error or omission that does one or more of the following:

- (i) <u>understates</u> the interconnection customer's cost responsibility for either network upgrades or Participating TO Interconnection Facilities by more than five (5) percent or one million dollars (\$1,000,000), whichever is greater; or
- (ii) <u>overstates</u> the interconnection customer's cost responsibility for either network upgrades or Participating TO's interconnection facilities of more than twenty (20) percent; or
- (iii) results in a delay to the schedule by which the interconnection customer can achieve commercial operation of its generating facility by more than one year.

An interconnection customer's dispute over the plan of service shall not be considered a substantial error or omission unless the interconnection customer demonstrates that the plan of service was based on an invalid or erroneous study assumption that meets the criteria set forth above.

Non-substantial error/omission triggers study report addendum but no extension of posting timeframe. GIP Section 6.10.2 also addresses changes in reports for errors or omissions that are not substantial. If an error or omission in an interconnection study report is not a substantial error or omission, the CAISO does not issue a revised final report, but, rather, an addendum to the final report. 15

New GIP Section 6.10.3 provides that only substantial errors or omissions (which are the ones that automatically trigger a revised report) adjust posting dates. GIP Section 6.10.3 states that, unless the error or omission is a

The CAISO and applicable Participating TO shall also incorporate, as needed, any corrected information pertinent to the terms or conditions of the interconnection agreement in the draft agreement provided to an interconnection customer pursuant to Section 11 of the GIP.

substantial error resulting in the issuance of a revised final interconnection study report, the correction of an error or omission shall not operate to delay any deadline for posting interconnection financial security.

Extended timeline for substantial error/omission reflected in revised report. In the case of a substantial error or omission resulting in the issuance of a revised final Phase I or Phase II interconnection study report, the deadline for posting interconnection financial security shall be extended (by time frames contained in new language added to GIP Section 9).

In addition to issuing a revised final report, the CAISO will promptly notify the interconnection customer of any revised posting amount and the extended due date occasioned by a substantial error or omission.

<u>Disputes over the report</u>. GIP Section 6.10.3 also states that an interconnection customer's *dispute of a CAISO determination that an error or omission* in a Phase I or Phase II interconnection study report does not constitute substantial error shall not operate to change the amount of interconnection financial security that the interconnection customer must post or to postpone the applicable deadline for the interconnection customer to post interconnection financial security.

In case of such a dispute, the interconnection customer shall post the amount of interconnection financial security (in accordance with Section 9 of the GIP), *subject to refund* in the event that the interconnection customer prevails in the dispute.

The CAISO believes that this provision strikes the appropriate balance between interconnection customer interests and the integrity of the process, which could be harmed if unviable projects, through assertion of study report errors, could defer the impact of financial security postings. It will also provide clarity for interconnection customers as to the procedure when if they dispute findings in the report. In this regard, the new provision incorporates the rule which the Commission has set out in orders relating to disputes filed by CAISO interconnection customers under the cluster process related to alleged errors in study reports and the related interconnection financial postings – that the customer must post subject to refund. ¹⁶

See, e.g., California Independent System Operator Corp., 129 FERC ¶ 61,197, at P 13 (2009) (denying motion and request for waiver of Clipper Windpower re initial financial posting: "until the section 206 proceeding is resolved, section 9.2 of the CAISO's GIPR LGIP remains in effect (subject to refund), and as such Clipper Windpower remains obligated to its original financial deposit until such time, if at all, that this amount is determined to be unjust and unreasonable and a new just and reasonable amount is established"). See also TGP Development Co., LLC v. California Independent System Operator Corp., 135 FERC ¶ 61,083 (2011) (dismissing complaint and denying request for stay of interconnection customer financial security posting obligation).

Revised reports and posting timeline extensions. The GIP Phase 2 amendment revises the GIP Section 9 posting timelines to provide additional time when a revised study report is issued.

Revisions to Section 9.2.2, relating to the initial interconnection financial security postings, state that, in the event of revision to a final Phase I interconnection study report under Section 6.10, the initial posting will be due by the later of:

- 90 calendar days after issuance of the original final Phase I interconnection study report; or
- 40 calendar days after issuance of the revised final Phase I interconnection study report.

Similarly, revisions to GIP Section 9.3.1.2, relating to the second interconnection financial security postings, provide that, if the CAISO revises a final Phase II interconnection study report pursuant to GIP Section 6.10, the postings set forth in GIP Section 9.2 will be due by the later of:

- 180 calendar days after issuance of the original final Phase II interconnection study report; or
- 60 calendar days after issuance of the revised final Phase II interconnection study report.

Additional time for interconnection agreement negotiation. In addition, the GIP Phase 2 amendment revises GIP Section 11.2, regarding the timing of negotiation of LGIAs, to adjust the time frames set forth in GIP Section 11.2 from 90 calendar days to 120 calendar days.

The CAISO's experience with interconnection agreement negotiation under the cluster system in the climate of an accelerated state RPS requirement and a tight commercial setting has shown that contract negotiations have increasingly departed from the pro forma approach anticipated in the Commission's Order No. 2003 generator interconnection standardization process. Recurring issues include project phasing and interconnection customer desire to divide the generation facility among several co-owners and/or lender transactions, which add complexity and time to the effort. Moreover, as the Commission noted in its original September 2008 order accepting the CAISO's cluster process, the CAISO and Participating TOs have found it challenging to prepare and negotiate numerous interconnection agreements all at once at the conclusion of a Phase II study cluster. 17

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Correction of tariff cross-reference error. The GIP Phase 2 amendment also corrects an inaccurate cross-reference in related CAISO Tariff Section 37.9.4. Specifically, Section 37.9.4 has been revised to conform/correct the tariff section number of the cross-reference in the section to another part of the CAISO Tariff. The existing cross-reference refers to the other tariff as numbered under the "pre-MRTU" CAISO Tariff. Under the CAISO's fifth replacement CAISO Tariff, Section 11.8.5.3 (b) (the cross-reference) was *renumbered* as Tariff Section 11.29.9.6.3 (in fact, under the replacement tariff (the "MRTU Tariff"), *there is no Section 11.8.5 or 11.8.5.3(b)*). The GIP Phase 2 amendment conforms the reference to the correct section number.

C. Item #3: Definitions of Start of Construction and Other Transmission Construction Phases, and Posting Requirements at Each Milestone

In the GIP Phase 2 stakeholder process, a number of stakeholders requested that the CAISO provide further detail in GIP Section 9.3.2 which provides that an interconnection customer must, as part of its third posting of interconnection financial security, post financial security for 100 percent of the costs of all applicable network upgrades, regardless of timing of the construction of such upgrades. Specifically, stakeholders requested that this obligation be amended to specifically state that customers are able to make separate and discrete postings based on certain regularly-defined discrete components of the transmission upgrade construction process, and the timing of the construction of such components.²⁰

It has been the position of the CAISO that the current CAISO Tariff and policy already permit the "parsing" of the third financial security posting into separate and discrete components that reflect separate and discrete components or elements of the network upgrade work of construction. The CAISO noted this fact to stakeholders in the final stages of the GIP Phase 1 stakeholder process. Also, by way of example, Appendix BB of the CAISO Tariff (which LGIA is applicable to legacy large generator interconnections that pre-date the cluster process) provides:

11.5 **Provision of Security**. At least thirty (30) Calendar Days prior to the commencement of the procurement, installation,

The relationship to the GIP is this: Any retained funds (*i.e.*, funds not returned to interconnection customers) provided as study deposits or interconnection financial security is treated in accordance with CAISO Tariff Section 37.9, of which Section 37.9.4 is a part. Section 37.9 governs distribution of proceeds collected for violations of the CAISO's Rules of Conduct (which are contained in Section 37 of the CAISO Tariff).

The CAISO Simplified and Reorganized Tariff.

Provided Droft Final Proposal at 26, 27 (Section 1)

Revised Draft Final Proposal at 26-27 (Section 7.2.4).

or construction of a discrete portion of a Participating TO's Interconnection Facilities, Network Upgrades, or Distribution 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 identified in Article 14.2.1.

While no interconnection requests under the GIP will utilize this particular form of LGIA today, the CAISO has stated the concept of parsing the third posting requirement to reflect discrete components of construction still remains valid under the cluster interconnection process.

Nevertheless, stakeholders requested that the CAISO include specific language in either the Tariff or a Business Practice Manual ("BPM") to articulate this policy. Accordingly, to address this stakeholder request, the GIP Phase 2 amendment revises GIP Section 9.3.2 to state that, if an interconnection customer's network upgrades are separated into two or more specific components and/or can be separated into two or more separate and discrete phases of construction and the Participating TO is able to identify and separate the costs of the identified discrete components and/or phases of construction, then the Participating TO, the CAISO, and the interconnection customer may negotiate, as part of the generator interconnection agreement, a division of the third posting of interconnection financial security into smaller deposit amounts and may establish discrete milestone dates for posting the amounts corresponding to each discrete component and/or phase of construction related to the network upgrades and/or interconnection facilities described in the interconnection agreement.

The addition of this language is just and reasonable because it will provide greater flexibility to all parties in the interconnection process.

D. Item #4: Information Provided by the CAISO through Internet Postings

In the GIP Phase 2 stakeholder process, the CAISO and stakeholders determined that the CAISO Tariff should be modified to provide clarity on what confidential information will be posted to the CAISO's secure website.²¹ The GIP Phase 2 amendment amends GIP Section 3.6, regarding postings by the CAISO on the Internet, to clarify that the CAISO will post to its secure website any documents or other materials posted pursuant to the GIP or a Business Practice Manual that contain Critical Energy Infrastructure Information.

Revised Draft Final Proposal at 28-29 (Section 7.2.6).

E. Item #5: Reduction in Generator Project Size for Permitting or Other Extenuating Circumstances

During the GIP Phase 2 stakeholder process, some stakeholders expressed a desire for increased flexibility to reduce the MW generating capacity (size) of a project specified in the interconnection customer's LGIA due to various reasons, the majority of which being identified as land, permitting, or other issues, without triggering the need to start over with a new interconnection request.²²

The pertinent provision is contained in Article 5.19 of the CAISO's *proforma* LGIA, which addresses modifications to interconnection customer generating facilities. If a modification is significant enough, it may constitute a material modification which would not be approved under the LGIA modification provision. This would require the customer to submit a new interconnection request relating to the generating project as modified.²³

The GIP Phase 2 proposal adds a new Article 5.19.4 to the LGIA to address the primary point of concern driving the generator stakeholders' request.

The five percent "safe harbor" permitted reduction. Article 5.19.4 states that an interconnection customer may reduce the MW generating capacity of the generating facility by up to 5% for any reason, during the time period between the effective date of the LGIA and the Commercial Operation Date. The 5% value is established by reference to the MW generating capacity as set forth in the "Interconnection Customer's Data Form To Be Provided by the Interconnection Customer Prior to Commencement of the Phase II Interconnection Study" (Appendix B to Appendix 3 of the GIP).²⁴

In the GIP 2 stakeholder process, the CAISO agreed with developers that allowing them a safe harbor to downsize their project was appropriate, but realized that the scope of such a provision would need to take into account the

See LGIA, Article 5.19.1. A material modification is defined in Article 1 of the LGIA as 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.

Revised Draft Final Proposal at 37-38 (Section 7.3.2) and Addendum #9.

Some stakeholders requested that the reference point for the 5% value be set at the MW capacity level which is set forth in the LGIA, arguing that it is possible that there could be a reduction from the commencement of the Phase II interconnection study process and the capacity size set out in the LGIA. The CAISO noted in response that it had specifically chosen the commencement of Phase II because it wanted to avoid the possibility of such an expanded reduction under the safe harbor provision. Prior to the commencement of Phase II, through the act of submitting the Appendix B to the form of interconnection request, the interconnection customer knowingly sets the MW capacity level, having had an opportunity after the conclusion of the Phase I interconnection process to reduce the project MW capacity size. Accordingly, the CAISO determined that, balancing the interests and risks of interconnection customer and ratepayer, the reference point for the 5% safe harbor value should be the MW size chosen by the customer.

fact that permitting downsizing at a late stage in the interconnection process involves a balancing of interests between the interconnection customer and ratepayer: specifically, the allocation of risk that transmission may not be able to be "de-scoped" in response to a generating capacity MW reduction, resulting in a transmission asset being built that is too large, built too soon, or, in the worst case, not needed. It is important in this regard to note that, under the GIP, interconnection customers receive cash reimbursement (but can choose congestion revenue rights) for network upgrades they finance. Accordingly, as has been stated often in filings to the Commission regarding Participating TO up front funding within the CAISO controlled grid, the ratepayers ultimately pay the cost of network upgrades, through the mechanism of the TAC. And the excess cost of such transmission is not related just to construction. There are costs to operation and maintenance of the transmission asset over its entire lifetime.

The CAISO also factored into its safe harbor percentage determination the possibility that including any significantly larger size-reduction value in Article 5.19.4 could operate to provide interconnection customers an incentive to overstate the sizes of the generating units they intend to develop, with the expectation that they could freely exercise a reduction option later even though such downsizing could have the consequence of shifting costs (to construct, operate, and maintain the transmission assets over the lifetime of the assets) to ratepayers when the size and scope of the upgrades might not have been triggered had the customers made initial interconnection requests at the outset for interconnection at the reduced "as-built" MW generating capacity. Ultimately, the CAISO determined, based on an assessment of deliverability on the CAISO's current system, that a 5% safe harbor value struck the best balance between providing customers the flexibility to downsize their projects while protecting ratepayers against bearing the costs of under- or non-utilized transmission assets. Most of the transmission upgrades on the CAISO's system are triggered by overloads higher than 105%. Therefore, a 5% reduction in generator size will generally not change the scope of identified transmission upgrades.

Some stakeholders, however, argued for a larger safe harbor amount, such as 20%. These stakeholders maintain that allowing a larger safe harbor will not negatively impact the CAISO's system and interconnection process because, according to these stakeholders, reduction of facility size simply results in "releasing of transmission capacity back to the system." However, as indicated above, it might not in fact be the case that the "returned capacity" has value to the system at the time of "release" or ever. It is axiomatic that transmission deliverability capacity in one location is not necessarily fungible with transmission deliverable capacity in another location.

Further, as discussed below, the CAISO counterbalanced the safe harbor provision with an additional provision within proposed Article 5.19.4 allowing interconnection customers to request size reductions greater than 5% upon

demonstration of circumstances driving MW reduction that are beyond the customers' control. Thus, the CAISO Tariff *will permit* reductions greater than 5% in those circumstances.²⁵

Opportunity for further reduction by customer demonstration of intervening events beyond the customer's control. New Article 5.19.4 provides the interconnection customer with the opportunity for further MW reduction size. This downsize is not "pre-authorized;" however. The customer must make its case. Article 5.19.4 provides that the applicable Participating TO(s) and CAISO will consider an interconnection customer's request for a reduction in the MW generating capacity greater than five percent under limited conditions where the interconnection customer reasonably demonstrates to the Participating TO and CAISO that the MW generation capacity reduction is warranted, due to reasons beyond the control of the interconnection customer.

Under Article 5.19.4, "reasons beyond the control of the interconnection customer" include events in the nature of failure to secure required permits and other governmental approvals to construct the generating facility at its full MW generating capacity, if the interconnection customer has made diligent efforts to do so. Upon such demonstration to the reasonable satisfaction of the Participating TO and CAISO, the Participating TO and CAISO will permit such reduction.

Article 5.19.4 further provides that the MW reduction size in the generating capacity of the generating facility does not operate either to reduce the cost responsibility of the interconnection customer for network upgrades or to reduce the customer's right to repayment for financing of network upgrades under the LGIA.

F. Item #6: Repayment of Interconnection Customer Funding for Network Upgrades Associated with a Phased Generating Facility

GIP Section 12.3.2 addresses repayment of amounts for network upgrades and refund of interconnection financial security. Section 12.3.2 currently provides that an interconnection customer is not entitled to a repayment for the interconnection customer's contribution to the cost of network upgrades until the Commercial Operation Date of the *entire generating facility*, which the CAISO Tariff states refers to all facility phases if the generating facility is constructed in phases. Therefore, under this existing provision, a customer that constructs its project in phases will not be entitled to any repayment of network upgrade costs until its entire facility is placed in operation. As another consequence of this provision, should the customer fail to construct all phases of

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the generating facility, it may *never* be entitled to any repayment of its contribution to network upgrade financing.

In the GIP Phase 2 stakeholder process, the CAISO agreed with stakeholders that customers that construct their projects in phases should not have to wait in all circumstances for completion of the entire generating facility or be *ipso facto* disqualified from receiving any repayment if all phases of the generating facility are not fully constructed. Rather, such customers should be eligible to receive partial repayment of network upgrade costs that they have funded, prior to completing their entire projects, under certain conditions.²⁶

In the course of developing the criteria for interconnection customer repayment of contributions to network upgrading funding for phased generating facilities, an issue emerged which the CAISO believes has always been embedded in the mechanics of the repayment process but which some stakeholders have argued to the CAISO is a "new requirement."

In general, the issue boils down to whether a customer can receive reimbursement for financing with respect to network upgrades if the generating facility phase has achieved commercial operation before the network upgrades are placed into service. In the renewable generation era, generating facilities are more modular in their design and their construction then their traditional fossil fuel counterparts, and are often located further away from load or existing transmission. In these circumstances, some or all generating facility phases may achieve early "energy-only" interconnection before the corresponding delivery network upgrades necessary to achieve full capacity deliverability status are completed.

Some stakeholder have argued that, in such circumstances, repayment should begin even if the construction of network upgrades is not completed, on the grounds that "the two things have nothing to do with each other" because the Order No. 2003 *pro forma* interconnection agreement did not include a condition that the upgrades be placed in service.

In analyzing this issue, the CAISO determined that the logic of the "inservice" requirement is compelled by the following practical mechanical process: In response to an inquiry from the CAISO, the three largest Participating TOs in California – Pacific Gas and Electric Company ("PG&E"), Southern California Edison Company ("SCE"), and San Diego Gas & Electric Company ("SDG&E") each of those Participating TOs confirmed to the CAISO that it commences repayment to the interconnection customer only after the network upgrade is "placed into rates" through recovery in the TAC. Only then does the Participating TO secure the revenue stream for the repayments to the interconnection

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customer. And further, each Participating TO confirmed that it does not request recovery for the network upgrade transmission assets from TAC until *after* the network upgrade transmission assets are placed into service. Accordingly, the placement in service is *de facto* a prerequisite to interconnection customer repayment.

Some stakeholders have indicated to the CAISO Governing Board and in comments on the draft GIP Phase 2 tariff language that they continue to "object" to this aspect of the proposed revisions to GIP Section 12.3.2.

However, the CAISO respectfully submits that the provision is just and reasonable, as demonstrated by the fact that, were the "placed in service" criterion not included in the repayment section, the GIP could require Participating TOs to begin repaying interconnection customers *before* the Participating TO has received, through TAC, the stream of payment that funds the repayment to those customers. This seems inconsistent with the Order No. 2003 approach that interconnection customers first pay for the construction of the network upgrades driven by their generation interconnections.

Accordingly, the GIP Phase 2 amendment includes new GIP Section 12.3.2.2 regarding the repayment of network upgrade costs funded by phased generating facilities. Section 12.3.2.2 includes a "placed in service" criterion with respect to network upgrades associated with a phase.

The new section allows the Participating TOs the flexibility to associate various components of the network upgrades with phases of the generating facility. GIP Section 12.3.2.2 states that, upon the Commercial Operation Date of each phase of a *phased generating facility*,²⁷ the interconnection customer shall be entitled to a repayment for the interconnection customer's contribution to the cost of network upgrades for that completed phase in accordance with the interconnection customer's cost responsibility assigned for the phase under GIP Sections 7.3 and 7.4 when all of the conditions below are satisfied:

- (a) The generating facility is capable of being constructed in phases;
- (b) The interconnection agreement specifies that the generating facility is being constructed in phases;
- (c) The completed phase corresponds to one of the phases specified in the interconnection agreement;

The GIP Phase 2 amendment includes *Phased Generating Facility* as a new defined term in the CAISO Tariff. GIP Section 1.2.2 defines a *Phased Generating Facility* as a Generating Facility that is structured to be completed and to achieve Commercial Operation in two or more successive sequences that are specified in a GIA, such that each sequence comprises a portion of the total megawatt generation capacity of the entire Generating Facility.

- (d) The interconnection customer has tendered the notice required by its interconnection agreement that the phase has achieved Commercial Operation;
- (e) All interconnection agreement parties have agreed that the completed phase meets the requirements set forth in the agreement (and any other operating, metering, and interconnection requirements to permit generation output of the entire capacity of the completed phase in the interconnection agreement);
- (f) The network upgrades necessary for the completed phase to meet the desired level of deliverability are in service; and
- (g) The interconnection customer has posted 100% of the interconnection financial security required for the network upgrades for all the phases of the generating facility.

GIP Section 12.3.2.2 further states that, upon satisfaction of these conditions (a) through (g), the interconnection customer shall be entitled to receive a partial repayment of its financed cost responsibility in an amount equal to the percentage of the generating facility declared to be in Commercial Operation multiplied by the cost of the network upgrades associated with the completed phase. The customer shall be entitled to repayment in this manner for each completed phase until the entire generating facility is completed.

Further, GIP Section 12.3.2.2 states that a reduction in the electrical output (MW capacity) of the Generating Facility pursuant to Article 5.19.4 of the LGIA (discussed above in Section II.E) does not diminish the interconnection customer's right to repayment.

Also, if the interconnection agreement includes a partial termination provision and the partial termination right has been exercised with regard to a phase that has not been built, then the customer is still eligible for repayment as to the remaining phases..

If the interconnection customer completes one or more phases and then defaults on the interconnection agreement, then the Participating TO and the CAISO shall be entitled to offset any losses or damages resulting from the default against any repayments made for network upgrades related to the completed phases provided that the party seeking to exercise the offset has complied with any requirements which may be required to apply the stream of payments utilized to make the repayment to the customer as an offset.

The CAISO believes that these provisions best capture the Commission's intent in the Order No. 2003 series of orders to strike a balance between

ensuring that customers are fairly repaid for their contributions to network upgrade costs, while at the same time avoiding the insulation of customers from the consequences of their interconnection decisions. In Order No. 2003, the Commission achieved this result by requiring that transmission providers provide interconnection customers with dollar-for-dollar credits for payments made by the customer for transmission service taken by the generating facility. Thus, the Commission recognized that a generator customer should be entitled to repayment based on that generator's actual utilization of the transmission system. By allowing for repayment when a specific generator phase has been constructed and placed into commercial operation, and tying that right to the inservice date for associated network upgrades, the CAISO achieves the same result as the Commission's *pro forma* LGIA language – that is, the customer is entitled to repayment based on the transmission assets that it is actually utilizing.

As part of the GIP Phase 2 amendment on this subject of repayment, similar revisions to those described above are included in the small generator interconnection agreement (i.e. Article 5.3.1 and Attachment 1 of CAISO Tariff Appendix T (the SGIA), and in Articles 1 and 11.4.1 of CAISO Tariff Appendix CC (the queue cluster LGIA).

G. Item #7: Accommodation of Qualifying Facility Conversions, Repowering, Deliverability at Distribution Level, and Other Special Circumstances

In the GIP Phase 2 stakeholder process, the CAISO and stakeholders considered how to refine the CAISO's interconnection process to accommodate several types of special circumstances involving generating units.³⁰ The CAISO and stakeholders developed the tariff revisions discussed below to address those types of circumstances identified in the stakeholder process.³¹ The tariff revisions are just and reasonable because they provide greater flexibility for

Standardization of Generator Interconnection Agreements and Procedures, Order No. 2003, FERC Stats. & Regs. ¶ 31,146 ("Order No. 2003"), order on reh'g, Order No. 2003-A, FERC Stats. & Regs. ¶ 31,160, at P 614 (2004) ("Order No. 2003-A"), order on reh'g, Order No. 2003-B, FERC Stats. & Regs. ¶ 31,171 ("Order No. 2003-B"), order on reh'g, Order No. 2003-C, FERC Stats. & Regs. ¶ 31,190 (2005) ("Order No. 2003-C").

Order No. 2003-A at P 615 ("Therefore, we are restoring to Article 11.4.1 language from the NOPR LGIA that required the Transmission Provider to provide the Interconnection Customer with dollar-for-dollar credits only for the payments that are made for transmission services taken with respect to the Generating Facility.").

Revised Draft Final Proposal at 42-47 (Section 7.3.6) and Addendum #6.

Revised Draft Final Proposal at 42 ("[G]eneration development remains highly dynamic and various factors, including financial market conditions, evolving environmental policy, and simply lessons learned, have led to a greater emphasis on diverse project opportunities, including qualifying facility conversions, repowering, and smaller less transmission dependent distributed supply. Accordingly, stakeholders have requested review of ISO interconnection processes and procedures to assess potential improvements to accommodate these developing market opportunities.").

interconnection customers with regard to the special circumstances discussed below. This greater flexibility will enhance the ability of customers to interconnect their generating units to the CAISO controlled grid, which will in turn increase customers' incentives to interconnect renewable generation and other types of generation to the CAISO's grid.

The CAISO proposes to revise CAISO Tariff Section 25.1, regarding the applicability of the provisions regarding generator interconnection in the CAISO Tariff and the generator interconnection procedures to the categories of Generating Units listed in Tariff Section 25.1.

As stated in revised Tariff Section 25.1, the CAISO and/or the applicable Participating TO shall be authorized to verify whether the requirements of Tariff Section 25.1(b), -(c), -(d), and -(e) apply to each existing generating unit described in those subsections, and the owner of the existing generating unit shall be responsible for any costs related to that verification process pursuant to the Business Practice Manual.

In addition, the GIP Phase 2 amendment includes a new subsection (e) in Tariff Section 25.1 to state that the provisions regarding generator interconnection in the CAISO Tariff and the generator interconnection procedures apply to each existing generating unit that is a Qualifying Facility and that is converting to a "Participating Generator" without repowering or reconfiguring the existing generating unit, subject to Tariff Section 25.1.2. In conjunction with the addition of new Tariff Section 25.1(e), Tariff Section 25.1.2 is revised to apply the affidavit requirement set forth in that section to the types of Qualifying Facilities to which new Tariff Section 25.1(e) applies.

Further, the GIP Phase 2 amendment revises GIP Section 4.2.1 relating to the GIP Independent Study Process to accommodate certain "behind-the-meter expansions" to an existing facility. The intent is to facilitate use of this GIP study track for such behind-the-meter expansions.

Revised Section 4.2.1 states that an interconnection request shall have satisfied the "flow impact test" component of the Independent Study Process under the GIP if the interconnection request satisfies either one of two sets of alternative requirements identified in GIP Section 4.2.1.

The *first set of alternative requirements* is the existing flow impact test in GIP Section 4.2.1, which the CAISO does not propose to change.

The second set of alternative requirements in GIP Section 4.2.1 (specifically, in Section 4.2.1.2) is new. The new, second set of alternative requirements apply to an interconnection request relating to a behind-the-meter expansion where the existing generating facility prime mover is wind technology

or solar technology. The new requirements provide that an interconnection request requesting to be processed under the Independent Study Process will pass the flow impact test if it satisfies all of the following technical and business criteria for behind-the-meter capacity expansion of a generating facility:

- (i) Technical criteria.
 - The total nameplate capacity of the expanded generating facility does not exceed in the aggregate 125% of its previously studied capacity and does not exceed, in the aggregate, 100 MW.
 - The behind-the-meter capacity expansion shall not take place until after the original Generating Facility has achieved Commercial Operation and all network upgrades for the original generating facility have been placed in service.
 - The expanded capacity for the generating facility has been placed under a separate breaker (the expansion breaker) such that the expansion can be metered separately at all times.
 - Unless specifically requested by the CAISO, the total output of the generating facility does not exceed its originally studied capacity at any time. The CAISO will have the authority to trip the expansion breaker if the total output of the generating facility exceeds the originally studied capacity amount.
 - The interconnection request for behind-the-meter expansion shall not operate as a basis under the CAISO Tariff to increase the Net Qualifying Capacity of the generating facility.³² The interconnection customer may submit a request pursuant to GIP Section 8.2 to seek full capacity deliverability status as to the increase.
- (ii) Business criteria.

 The deliverability status (full capacity or energy-only) of the capacity expansion is the same as the deliverability status specified for the formally studied generating facility.

Net Qualifying Capacity is defined in CAISO Tariff Appendix A. Generally it refers to downward adjustments to the Qualifying Capacity of the generating unit. The downward adjustments relate to output characteristics of the generation facility prime mover and other factors.

> The interconnection agreement is amended to reflect the revised operational features of the generating facility capacity expansion.

The changes to GIP Section 4.2.1 also permit the interconnection customer to, at any time, request that the CAISO formally study the expanded capacity of the generating facility in the GIP study process and formally add that capacity to its MW capacity.

<u>Use of Fast Track study process</u>. In addition, the GIP Phase 2 amendment revises GIP Section 5.1 to address the applicability of a Fast Track Process request under the GIP to certain specified types of existing generating facilities.

Under GIP Section 5.1 as revised, an interconnection customer may utilize the Fast Track process to include an up-to-5-MW increase increment to commercial "roll over" of the facility to a Participating Generator. If the interconnection of an existing generating facility meets the qualifications for interconnection under Tariff Section 25.1(d)³³ but, at the same time, the interconnection customer also seeks to repower or reconfigure the existing generating facility in a manner that increases the gross generating capacity by not more than 5 MW, then the interconnection customer may request that the Fast Track Process be applied with respect to the repowering or reconfiguration of the existing generating facility that results in the MW increase increment.

H. Item #8: Second and Third Interconnection Financial Security Posting Requirements to Offset Participating TO-Funded Network Upgrades

The GIP currently does not make any distinction between the interconnection financial security required from an interconnection customer in cases where the interconnection customer funds network upgrades and in cases where the Participating TO has committed to fund the network upgrades. This circumstance led the CAISO to request a tariff waiver in 2010 with respect to generating projects in the "transition cluster" whose upgrades would be "up-front funded" by the Participating TO. The Commission granted the CAISO's request for a tariff waiver.³⁴

Tariff Section 25.1(d) applies to each interconnection of an existing 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.

See California Independent System Operator Corp., 132 FERC ¶ 61,132 (August 13, 2010)

Moreover, a Participating TO's commitment to fund network upgrades has typically been dependent on Commission approval of abandoned plant cost recovery, which the Commission determines on a case-by-case basis.³⁵

To address these matters, in the GIP Phase 2 stakeholder process, the CAISO and stakeholders determined that the GIP should be modified to allow an interconnection customer to be relieved of the obligation to make second and third postings of interconnection financial security for network upgrades that the Participating TO commits to fund up-front on behalf of the interconnection customer, while taking into account Commission approvals of abandoned plant cost recovery.³⁶

This modification to the GIP is just and reasonable because it will excuse interconnection customers from having to post such interconnection financial security in cases where another party – the Participating TO – agrees to provide up-front funding of the network upgrades that the interconnection financial security concerns. As a result, interconnection customers will have a greater incentive to interconnect their renewable generation and other types of generation to the CAISO controlled grid.

Specifically, the GIP Phase 2 amendment adds new Section 9.3.3 to the GIP to address offsets for network upgrades funded by Participating TOs. GIP Section 9.3.3 states that, to the extent that the Participating TO unequivocally commits to up-front fund network upgrades for which an interconnection customer has been assigned cost responsibility, the interconnection customer will be relieved of the obligation to make the second and third postings of interconnection financial security for such network upgrades. The interconnection customer will remain obligated to make the second and third postings of interconnection financial security for that portion of its assigned network upgrades that the Participating TO does not unequivocally commit to upfront fund.

Interconnection customer milestones. Pursuant to GIP Section 9.3.3, as a prerequisite for the Participating TO up-front funding commitment to relieve the interconnection customer of its posting requirements for the related network upgrades, the up-front funding commitment must be conditional upon the interconnection customer's meeting milestones for development and construction of the generating facility. The milestones will include, such events as the securing of site exclusivity, posting of interconnection financial security to cover that portion of the network upgrades that the Participating TO is not funding, and security for the Participating TO's interconnection facilities, securing of necessary permits, licenses, and/or property rights required for the construction, selection of

Revised Draft Final Proposal at 47-51 (Section 7.4.1).

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See Promoting Transmission Investment Through Pricing Reform, Order No. 679, FERC Stats. & Regs. ¶ 31,222, at P 163 (2006).

applicable engineering, procurement and construction contractors, securing of necessary financing, and such other commercially reasonable milestones as the Participating TO, CAISO and interconnection customer agree to in the interconnection agreement.

Covering the contingency that up-front funding ceases. Under GIP Section 9.3.3, if the Participating TO withdraws its contractual commitment to upfront fund the network upgrades, the interconnection customer is required to post interconnection financial security to cover those network upgrades. The customer is required to do so within 30 days of the Participating TO's notice that the up-front funding is being withdrawn.

Covering the contingency that the second posting deadline arrives before execution of the interconnection agreement. GIP Section 9.3.3 goes on to state that, if the interconnection customer's obligation to make the second posting of interconnection financial security arises before the interconnection agreement is executed, then the customer will be provided an additional 30 days to post any interconnection financial security related to Participating TO up-front funded network upgrades. The interconnection customer must continue to engage in good faith efforts to complete the negotiation of the agreement during that period. If the agreement is not executed within the additional 30-day period, then the customer will then be required to post the remaining interconnection financial security, subject to refund.

Covering the timing of any abandoned plant approval award upon which up-front funding is conditioned. New GIP Section 9.3.3 also covers the situation where the Participating TO has made an up-front network upgrade funding commitment that is conditioned on a request for abandoned plant approval and the request is pending before the Commission. In such situation, the obligation to post the interconnection financial security (for network upgrades related to the Participating TO up-front funding commitment) will be suspended during the pendency of the request.

Anticipating Commission denial of the request for award. If the Commission issues an order denying the request for abandoned plant approval, the obligation to post the interconnection financial security for network upgrades will immediately be reinstated, and the interconnection customer will be required to post the interconnection financial security within 45 days of the issuance of the order, unless the parties to the interconnection agreement renegotiate that agreement within the 45-day period to provide for alternative timeframes or methods for funding the posting.

The GIP Phase 2 amendment includes a provision that such a renegotiated interconnection agreement will be deemed to be conforming to a Commission-approved standard form of interconnection agreement if the

agreement extends the time period for posting the interconnection financial security to a date no later than 75 days after the Commission order denying abandoned plant approval was issued or provides for continued Participating TO up-front funding of the network upgrades.

If the parties to the interconnection agreement are unable to renegotiate and execute the interconnection agreement within the 45-day period, the interconnection customer must post the interconnection financial security before the close of the time period (*i.e.*, by the 45th day).³⁷

I. Item #9: Interconnection Agreement Insurance Requirements

Article 18.3 of the current *pro forma* LGIA obligates all three parties to the LGIA (the interconnection customer, the Participating TO, and the CAISO) to provide evidence of insurance. In this regard, Article 18.3 currently does not recognize that the CAISO's role under the LGIA is different from the roles of the other two parties, who will undertake specific construction work as part of their performance under the contract.

The GIP Phase 2 amendment modifies Article 18.3 to exclude the CAISO from having to provide the same evidence of insurance coverage as the other parties who are undertaking construction obligations.

Article 18.3 is further modified to address other issues regarding insurance that were discussed in GIP Phase 2 stakeholder process, including issues concerning additional insured entities, the commercial unavailability of certain types of insurance policies with provisions wherein insurers waive all rights in subrogation, and the need to adjust the required insurance coverage amount for certain insurance components.³⁸

These revisions to the LGIA are just and reasonable because they provide greater clarity and specificity as to the respective roles of the parties to the LGIA with regard to providing evidence of insurance, as well as greater clarity and specificity as to the nuances of insurance law and the insurance requirements of the LGIA.

Specifically, the CAISO proposes the following modifications to the insurance provisions set forth in Article 18.3 of the *pro forma* LGIA:

The GIP Phase 2 amendment also modifies GIP Sections 9.3.1.1, 9.3.1.2, and 9.3.2 to state that the provisions in those sections regarding second and third postings of interconnection financial security apply except to the extent that the provisions of GIP Section 9.3.3 discussed above are applicable.

See Revised Draft Final Proposal at 51-54 (Section 7.4.2).

• Article 18.3.1 regarding employer's liability and workers' compensation insurance is modified to state that the Participating TO and the interconnection customer (not the CAISO) shall maintain such coverage from the commencement of any Construction Activities providing statutory benefits for workers compensation coverage and coverage amounts of no less than \$1,000,000 for employer's liability in accordance with the laws and regulations of the state in which the point of interconnection is located. The Participating TO shall provide the interconnection customer with evidence of such insurance within 30 days of any request by the interconnection customer.

The timing for insurance requirements is changed so that the interconnection customer provides evidence of insurance 30 days prior to entry by any employee or contractor or other person acting on the customer's behalf onto any construction site to perform any work related to the interconnection facilities or generating facility. The Participating TO must be listed as an additional insured.

 Article 18.3.2 regarding commercial general liability insurance is modified to state that the Participating TO and the interconnection customer (not the CAISO) shall maintain general commercial liability insurance commencing within 30 days of the effective date of the LGIA.

Article 18.3.2 is further modified to allow the insurance of a customer affiliate to satisfy the requirement. This change is appropriate because, quite often, the interconnection customer entity is a separate affiliate entity from the "parent" developer who is actually undertaking the actions that the policy is intended to cover. As modified, Article 18.3.2 states that, if the activities of the interconnection customer are being conducted through the actions of an Affiliate, then the interconnection customer may satisfy the insurance requirements by providing evidence of insurance coverage carried by such Affiliate and showing the Participating TO as an additional insured, together with the interconnection customer's written representation to the Participating TO and the CAISO that the insured Affiliate is conducting all of the necessary pre-construction work.

Within 30 days prior to the entry of any person on behalf of the customer onto any construction site to perform work related to the interconnection facilities or generating facility, the interconnection customer shall replace any evidence of Affiliate Insurance with evidence of such insurance carried by the customer, naming the Participating TO as additional insured.

 Article 18.3.3 regarding business automobile liability insurance has been modified to state that, prior to the entry of any such vehicles on any

construction site in connection with work done by or on behalf of the interconnection customer (a later time than the current pro forma CAISO LGIA), the customer shall provide evidence of 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. Upon the request of the Participating TO (rather than as a default), the interconnection customer shall name the Participating TO as an additional insured on any such policies.

- Article 18.3.4 regarding excess public liability insurance has been modified to state that, commencing at the time of entry of any person on its behalf upon any construction site for the network upgrades, interconnection facilities, or generating facility, (a later time than the current pro forma CAISO LGIA) the Participating TO and the interconnection customer shall maintain 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 \$20,000,000 per occurrence/ \$20,000,000 aggregate. Such insurance carried by the Participating TO shall name the interconnection customer as an additional insured, and such insurance carried by the interconnection customer shall name the Participating TO as an additional insured.
- Article 18.3.5 has been modified to state that, if any party can reasonably demonstrate that coverage policies containing provisions for insurer waiver of subrogation rights, or advance written notice are not commercially available, then the parties shall meet and confer and mutually determine to (i) establish replacement or equivalent terms in lieu of subrogation or notice or (ii) waive the requirements that coverage(s) include such subrogation provision or require advance written notice from such insurers.

This modification is made to conform to the commercial experience of interconnection customers that insurers will not agree to provide waiver of subrogation or advance written notice of the events described in the *pro forma* CAISO LGIA.

J. Item #10: Adjusted Versus Non-Adjusted Dollars in Interconnection Study Reports and Interconnection Agreements

Currently, there is no standard practice for the use of adjusted (constant) or non-adjusted (nominal) dollar amounts to specify interconnection and network upgrade costs in interconnection study reports and LGIAs.

The CAISO believes that it is important to adopt a uniform approach for stating network upgrade costs, because doing so will allow interconnection customers to better understand the relative magnitude of their financial commitments.

Accordingly, the GIP Phase 2 amendment modifies Section 2.4.3 of the GIP provide that all cost estimates for interconnection facilities and network upgrades contained in interconnection studies will be set forth in present dollar costs as well as time-adjusted dollar costs, adjusted to the estimated year of construction of the components being constructed.

As a complement to the amended tariff section, the CAISO has been working with Participating TOs to develop a standardized format for presentation of cost estimates in interconnection study reports.

K. Item #11: Financial Responsibility Cap and Maximum Cost Responsibility

Since the initial CAISO cluster study reports were issued in 2009, various stakeholders have expressed a concern to the CAISO that the language in the GIP regarding funding obligations for network upgrades is not entirely clear with respect to an interconnection customer's maximum cost responsibility for network upgrades. The CAISO has consistently taken the position the most logical reading of the entirety of the provisions of the GIP is that an interconnection customer's maximum cost responsibility is the lower of the Phase I or Phase II interconnection study cost estimates.

In order to resolve concerns about ambiguity in the GIP, the GIP Phase 2 amendment includes revisions to Sections 6.7 and 9.5 to make it explicit that the interconnection customer's maximum cost responsibility is established first by the cost estimates in the Phase I interconnection study report, and subsequently, after issuance of the Phase II interconnection study report, by the lower of cost estimates contained in the Phase I or Phase II interconnection study.

L. Item #12: Posting Cap for Financial Security Relating to PTO Interconnection Facilities

Under the GIP, Interconnection customers must post financial security to cover their responsibility for the costs of both network upgrades and those interconnection facilities that will be constructed and owned by the applicable Participating TO(s) ("PTO Interconnection Facilities"). With respect to network upgrade costs, the financial security required for the first and second postings is based on lower of three screens, with a hard cap on the total amount required, while the security required for PTO Interconnection Facilities is a straight percentage of the overall cost of those facilities.

In the course of the GIP Phase 2 stakeholder process, several generator stakeholders asked that the CAISO include within the GIP Phase 2 proposal a cap on the amount of financial security required for PTO Interconnection Facilities. These stakeholders noted that the Phase I interconnection study does not consider individualized information for each interconnection customer, such as the customer's ownership of land or rights of way that might result in a savings in constructing their interconnection facilities as compared to a standard method of service. Although it is not possible to account for such individual circumstances given the timing and scope of the Phase I study, the CAISO agreed that, because individualized circumstances of each customer are not incorporated into the Phase I interconnection study cost estimation for PTO Interconnection Facilities, artificially high costs could occur as a result.

Accordingly, the GIP Phase 2 amendment includes modifications to GIP Section 9 regarding the financial security posting amounts for PTO Interconnection Facilities so that the posting amounts and cap mirror the screen and cap approach which the GIP sets out for interconnection financial security for the network upgrades. This solution garnered broad stakeholder support.

M. Item #13: Interconnection Agreement Suspension Rights

The GIP Phase 2 amendment includes additional language to the *pro* forma LGIA to provide additional clarity regarding the interconnection customer's right of suspension in the cluster study environment.

Article 5.16 of the LGIA provides that an interconnection customer has the right to suspend work on the construction and installation of interconnection facilities and network upgrades, except for those network upgrades identified in the Phase II interconnection study as "common to multiple Generating Facilities." In the course of the GIP Phase 2 stakeholder process, some stakeholders expressed uncertainty as to whether the "common to multiple Generating Facilities" limitation applied only to network upgrades common to those generators that were studied cluster to which the applicable interconnection customer belonged, or whether it extended to common upgrades identified for generators in other clusters.

The GIP Phase 2 amendment adds language to clarify the application of the "common to multiple Generating Facilities" limitation. Specifically, the revisions state that network upgrades common to multiple generating facilities, to which the interconnection customer's right of suspension shall not extend, consist of network upgrades identified for:

 generating facilities which are the subject of all interconnection requests made prior to the interconnection customer's interconnection request;

- generating facilities which are the subject of interconnection requests within the interconnection customer's queue cluster; and
- generating facilities that are the subject of interconnection requests that
 were made after the interconnection customer's interconnection request
 but no later than the date on which the interconnection customer's Phase
 II study report is issued, and have been modeled in the base case at the
 time the interconnection customer seeks to exercise its suspension rights
 under this section.

This approach strikes an appropriate balance between an interconnection customer's suspension rights and the impact those rights can have on other customers and Participating TOs. On the one hand, it is reasonable to limit the ability of interconnection customers to suspend work on network upgrades that will affect the ability of other interconnection customers to achieve commercial operation and deliver their outputs, particularly when those upgrades have been identified for generators in the same or previous clusters. On the other hand, defining the outside boundary of this limitation as those facilities that are the subject of interconnection requests made by the date on which the customer's Phase II study report is issued and have been included in the Base Case ensures that the customer's suspension right is not unreasonably diluted by making this limitation chronologically open-ended or basing it on upgrades that have not been factored into future studies.

N. Item #14: Participating TO Cost Recovery

There are instances that arise under the CAISO's interconnection procedures and transmission planning process where a Participating TO is required, involuntarily, to up-front fund the costs of network upgrades because the costs of such upgrades cannot be allocated to interconnection customers.

In the course of the GIP Phase 2 stakeholder process, the CAISO agreed that under *three such circumstances*, it is in the best interest of market participants and ratepayers to provide a level of certainty to both transmission owners and generation developers that these costs would be eligible to be included in a Participating TO's Transmission Revenue Requirement ("TRR") and thereby recovered through the CAISO's TAC.

The three circumstances are as follows:

1. A Participating TO may be required to up-front finance and construct a network upgrade where an interconnection customer withdraws its project but the network upgrade cannot be downsized because it will be required for customers in later queue clusters. (GIP Section 12.2.2.)

- 2. A Participating TO may be involuntarily required to up-front finance and construct network upgrades where the costs of the project exceed the maximum cost responsibility of the relevant interconnection customers, but the scope of the project cannot be adjusted because the upgrades are still needed for those customers. (GIP Section 12.3.1.)
- 3. A Participating TO may be involuntarily required to up-front finance and construct network upgrades if such upgrades are re-evaluated in the transmission planning process and, due to project modifications identified through that process, the cost exceeds the generator(s) cost cap provisions and the transmission owner is required to upfront finance the difference between the generator(s) cost cap and the actual cost. (CAISO Tariff Section 24.4.6.5.)

With respect to the first two scenarios, when an interconnection customer withdraws its project from the queue, the expectation is that the Participating TO and CAISO will downsize the network upgrades to the extent practicable. However, such downsizing is not feasible in situations when the upgrades are needed to accommodate customers in the same cluster as the withdrawing customer, or customers in subsequent clusters.

With respect to customers in the same cluster, GIP Section 12.3.1 provides that if actual network upgrade construction costs are higher than the maximum cost responsibility that can be allocated to interconnection customers, then the Participating TO must finance the difference. Therefore, in cases where an interconnection customer withdraws after completion of the Phase I interconnection study, but the package of network upgrades identified for customers in the relevant study group is sufficiently "lumpy" such that it cannot be downsized such that the costs do not exceed the amount assigned to the remaining interconnection customers, the Participating TO must finance the difference. In such cases, Participating TO expense recovery though the Transmission Access Charge is appropriate, and indeed, the CAISO believes that this principle is already implicitly embodied in the CAISO Tariff and the GIP.

However, in the course of the GIP Phase 2 stakeholder process, Participating TOs expressed a concern that later occurring circumstances – such as changes in method of service configuration due to transmission licensing or other circumstances – could attenuate the connection between cost recovery eligibility under existing GIP Section 12.3.1 and the final GIP interconnection work.

Accordingly, the GIP Phase 2 amendment includes language in Section 12.3.1 to make explicit that to the extent that Participating TOs must fund network upgrades because the costs of such upgrades exceed the total cost responsibility assigned to interconnection customers, Participating TOs shall be

presumed to be eligible, subject to prudency and any other applicable review by the Commission, to include such costs in their TRR.

With respect to customers in a future cluster, Section 12.2.2 of the GIP provides that if an interconnection customer with an interconnection agreement withdraws its project, the applicable Participating TO must finance and construct network upgrades identified for that interconnection customer to the extent that such upgrades were included in the base case data for a Phase II interconnection study and the Participating TO and the CAISO agree that those upgrades are still needed to support other projects that have already entered into interconnection agreements, and are therefore cost-capped. As with the circumstances involving customers in the same queue cluster, recovery of these costs though the TAC is appropriate.

Accordingly, the GIP Phase 2 amendment makes explicit the presumption that, to extent Participating TOs incur costs under GIP Section 12.2.2 associated with network upgrades in excess of those amounts covered by financial security posted by customers, Participating TOs shall be presumed to be eligible, subject to prudency and any other applicable review by the Commission, to include such costs in their TRR.

Finally, the third scenario involves circumstances where the CAISO's transmission planning process identifies interconnection upgrades that had not yet been set forth in an executed interconnection agreement but are needed due to policy reasons. Under CAISO Tariff Section 24.4.6.5, if network upgrades are re-evaluated in the transmission planning process and the cost exceeds the maximum funding responsibility of applicable interconnection customers, then the Participating TO is required to finance the difference between the generator cost cap and the actual cost. The concern expressed by Participating TOs with respect to this requirement was that their ability to recover such costs could be made more difficult if upgrades that they are required to fund under Section 24.4.6.5 were to be abandoned in whole or part.

For the same reasons as set forth in the first two scenarios, the CAISO agreed that it is appropriate for Participating TOs to recover costs that they are required to incur pursuant to CAISO Tariff Section 24.4.6.5. Accordingly, the GIP Phase 2 amendment adds language to Section 24.4.6.5 to make explicit that to the extent that additional components or expansions to network upgrades remain the responsibility of the Participating TO and upgrades are subsequently abandoned, the Participating TO shall be presumed to be eligible, subject to prudency and any other applicable review by the Commission, to include in its TRR the costs of such upgrades if the costs attributable to the abandonment of such upgrades exceed the amounts funded by interconnection customers pursuant to the GIP. The revision also states that this presumption shall not

apply in the case of network upgrades which the applicable Participating TO agreed to up-front fund independent of any obligation to fund.³⁹

O. Item #15: Partial Deliverability as an Interconnection Option

The CAISO's interconnection procedures currently provide interconnection customers with two deliverability options: Full Capacity Deliverability ("FC"), pursuant to which the customer is studied assuming the delivery of the full output of the customer's facility to the aggregate of load on the CAISO controlled grid, and Energy Only Deliverability ("EO"), pursuant to which no deliverability assumptions are made during the interconnection studies, and the customer is only responsible for those upgrades needed to reliability interconnect its project to the CAISO controlled grid.

In the GIP Phase 2 stakeholder process, some stakeholders indicated that full capacity deliverability Status can be financially prohibitive due to the costs of the network upgrades needed to provide this level of deliverability, and have therefore asked for the ability to elect to be studied assuming the delivery of only a portion of their capacity, thereby reducing some of the network upgrade costs. No stakeholders opposed this concept, and therefore, the CAISO agreed that, at this time, after some experience with the cluster study process, it was amenable to adding to the GIP the ability for customers to elect a third deliverability option: Partial Deliverability ("PD").

This option will provide interconnection customers with increased flexibility and help them manage their responsibility for costs associated with the delivery network upgrades.

The GIP Phase 2 amendment modifies several sections of the GIP to incorporate the PD concept. First, the defined term *Partial Deliverability Status* has been added to Appendix A to the CAISO Tariff. The term is defined as the condition whereby a large generating facility interconnected with the CAISO controlled grid can deliver an elected amount of output that is less than the full output of the large generating facility to the aggregate of load on the CAISO controlled grid, consistent with the CAISO's reliability criteria and procedures and

In the stakeholder review of CAISO draft tariff language for the GIP Phase 2 amendment, SCE commented that the presumption should apply to the situation where a Participating TO has agreed to up-front fund network upgrades but the up-front funding commitment has ceased because of action by the interconnection customer (such as missed milestones that condition upfront funding). The CAISO responded that this additional element of ratepayer exposure was raised too late, after consideration and approval by the CAISO Governing Board of the GIP Phase 2 proposal, and therefore the CAISO was precluded from expanding the scope of presumed recovery to include SCE's proposed element. See Attachment G to this tariff amendment, containing CAISO responses to stakeholder comments on the draft GIP Phase 2 tariff language, which include (at page 29 of Attachment G) the CAISO's response on this issue.

the CAISO on-peak deliverability assessment. This definition is analogous to the existing definition of the term *Full Capacity Deliverability Status* in Appendix A.

Also, an option for electing Partial Deliverability Status has been added to the interconnection request form, which is Appendix 1 to the GIP. When selecting that option, interconnection customers will be required to specify the amount of capacity, in MW, that they wish the CAISO to study for Partial Deliverability Status. New language is also added to GIP Sections 2.4.3, 6.5.2.1, 6.5.2.2, 7.1, and Appendices 3 and 6 to make clear that the interconnection studies will identify delivery network upgrades necessary to allow the elected output of those customers seeking Partial Deliverability Status.

A new Section 6.3 is added to the GIP entitled *confirmation of deliverability status*. The GIP Phase 2 amendment also relocates within this new Section 6.3 currently existing text from GIP Section 7.1 regarding a customer's obligation to confirm with the CAISO its deliverability status within five business days of the results meeting relating to the Phase I interconnection study. The relocated text is then modified in part. The limited substantive change to this language includes the following within the options for customers to reduce their desired deliverability status:

- from Full Capacity to Partial Deliverability and
- from Partial Deliverability to Energy-Only.

These additions are consistent with the current option for customers to reduce their deliverability from Full Capacity to Energy-Only.

P. Item #16: Technical Requirements Under an Interconnection Agreement

In 2010, the Commission accepted the CAISO's request to expand the applicability of Appendix H of the LGIA to all Asynchronous Generating Facilities, not just wind generators. The revised Appendix H clarified that all Asynchronous Generating Facilities, including solar photovoltaic technologies, must (1) satisfy specific low voltage ride-through ("LVRT") and frequency ride-through requirements, and (2) operate within a power factor range of 0.95 leading to 0.95 lagging, measured at the Point of Interconnection, if the Phase II interconnection study shows that such a requirement is necessary to ensure safety or reliability. ⁴⁰

Presently, Section 1.8 of Appendix T, (the CAISO's current *pro forma* SGIA) requires small generators to operate within power factor range of 0.95 leading to 0.90 lagging, except for wind generators. Wind generators are

See California Independent System Operator Corp., 132 FERC ¶ 61,196, at PP 66-72, order on reh'g and compliance filing, 137 FERC ¶ 61,143, at PP 40-42 (2010).

governed by Attachment 7, which largely tracks the provisions of Appendix H of the LGIA.

This leads to two suboptimal outcomes that must be remedied:

- First, large asynchronous solar photovoltaic resources have a less stringent reactive power requirement than small solar photovoltaic resources.
- Second, "sympathetic tripping" by small solar photovoltaic facilities may exacerbate the impact of a disturbance because of the absence of any applicable ride-through standards.

The GIP Phase 2 amendment applies the same technical requirements to both small and large asynchronous generating facilities that interconnect to the CAISO controlled grid. To implement this change the GIP Phase 2 amendment updates Attachment 7 of the SGIA with the same provisions that are in Appendix H to the LGIA.

Q. Item #17: Off-Peak Deliverability Assessment

Section 6.5.2.2 of the GIP requires the CAISO to conduct an off-peak deliverability study for interconnecting generators where the fuel source substantially occurs during the off-peak hours (*i.e.*, wind). This requirement could require these generators and/or the applicable Participating TO(s) to fund full capacity deliverability upgrades based on an off-peak deliverability assessment.

However, deliverability is ultimately used to determine the Net Qualifying Capacity of resources that wish to be treated as Resource Adequacy resources, and Net Qualifying Capacity is evaluated based on the ability of resources to meet peak demand. Therefore, the requirement that generators and/or Participating TOs fund network upgrades identified through the off-peak requirement does not align with the concept and purpose of deliverability as a Resource Adequacy concept.

The GIP Phase 2 amendment remedies this situation through several modifications to the GIP, most notably to Section 6.5.2.2.

Section 6.5.2.2 is revised to state that *beginning with the Phase II* interconnection studies for queue clusters 3 and 4, the off-peak deliverability assessment will be performed for informational purposes only, and any transmission upgrades identified in this assessment will be conceptual only and will not be included in a plan of service in interconnection study reports. The GIP Phase 2 amendment retains the off-peak deliverability assessment *on an*

informational basis because these assessments may still provide useful information to interconnection customers.

Tying the effectiveness of this change to the Phase II study for queue clusters 3 and 4 is necessary because the Phase I study for queue cluster 3 has already been performed pursuant to the current off-peak deliverability assessment, and the Phase II study will be performed jointly for clusters 3 and 4.

Costs of transmission upgrades identified in off-peak deliverability

Assessment. With respect to the costs of all transmission upgrades identified in the off-peak assessment, Section 6.5.2.2 has been modified to state that these costs will be estimated as part of the Phase I interconnection study, but because these upgrades shall be conceptual in nature only, as of the Phase II interconnection study for clusters 3 and 4. Beginning with that study the estimated costs of these upgrades shall not be assigned to any interconnection customer and the applicable Participating TO(s) shall not be responsible for financing or constructing these transmission upgrades.

In addition, the CAISO has made non-substantive conforming edits to Sections 6.4 and 7.4 of the GIP to reflect the changed nature of the off-peak deliverability assessment.

R. Item #18: Operational Partial and Interim Deliverability Assessment

In the GIP Phase 2 stakeholder process, the CAISO and stakeholders agreed that the CAISO would perform an operational partial and interim deliverability assessment as part of the Phase II interconnection study under the GIP.⁴¹

The addition of this new operational deliverability assessment is just and reasonable because it will enable the Phase II interconnection study to provide a more detailed and complete assessment consistent with existing provisions of the GIP and the GIP Phase 2 provisions regarding deliverability contained in this filing. Further, the CAISO's proposed methodology for conducting the operational deliverability assessment is comparable to the methodology the CAISO has employed with regard to generation interconnection transition cluster Phase II projects and resource adequacy. ⁴³

See, e.g., Section II.O of this transmittal letter (addressing partial deliverability as an interconnection option).

Revised Draft Final Proposal at 63-65 (Section 7.5.4) and Addenda #4 & 5.

See Technical Bulletin, Generator Interconnection Process: Partial Deliverability Analysis for Generation Interconnection Transition Cluster Phase II Projects (Aug. 30, 2010), available on the CAISO website at http://www.caiso.com/2802/2802860e49b50.pdf; CAISO Generator Deliverability Assessment Methodology: On-Peak Deliverability Assessment Methodology

The GIP Phase 2 amendment modifies GIP Section 7.1 to state that the CAISO will perform an operational partial and interim deliverability assessment (operational Deliverability Assessment) as part of the Phase II interconnection study.

When the CAISO discussed the draft GIP Phase 2 tariff language in a stakeholder conference call, the view was expressed that the proposed provisions as they looked at that time were too detailed for inclusion in the CAISO Tariff and should instead be included in a Business Practice Manual. Accordingly, the CAISO revised the draft tariff language to remove the detail and state within revised GIP Section 7.1 that the methodology would be set forth within a Business Practice Manual ("BPM") or posted on the CAISO website (added in the event that the BPM cannot be modified in time to accommodate preparation of an operational Deliverability Assessment).

III. Stakeholder Process

Beginning in with an issue paper posted on February 24, 2011, followed by stakeholder meetings beginning in March 2011, the CAISO established the stakeholder process that led to this GIP Phase 2 tariff amendment filing. Pursuant to the discussions with stakeholders over the following months, the CAISO developed the modifications to its tariff contained in this tariff amendment.

The CAISO held several meetings and conference calls with stakeholders to discuss the issues and implementation details regarding the GIP Phase 2 modifications, including a conference call to discuss the draft tariff language that the CAISO shared with stakeholders. The CAISO and stakeholders also held numerous working group meetings to discuss the GIP Phase 2 modifications. The CAISO produced several written proposals for stakeholder review during this process, including an issue paper on February 24, 2011, an issue ranking chart on March 21, 2011, a straw proposal on April 14, 2011, a draft final proposal on May 27, 2011, a revised draft final proposal on June 30, 2011 and an addendum to the revised draft final proposal on July 22, 2011. Further, the CAISO solicited written comments and suggested edits to the draft tariff language from stakeholders, which it used to formulate its final proposal as contained herein.⁴⁴

Resource Adequacy Purposes) (Apr. 10, 2009), available on the CAISO website at http://www.caiso.com/23d7/23d7e41c14580.pdf.

A list of key dates in the GIP Phase 2 stakeholder process is provided in <u>Attachment H</u> to this tariff amendment. In addition, materials related to the GIP Phase 2 stakeholder process are available on the CAISO website at

http://www.caiso.com/informed/Pages/StakeholderProcesses/GenerationInterconnectionProceduresPhase2.aspx.

At its August 25, 2011 meeting, the CAISO Governing Board authorized the CAISO to prepare and file this GIP Phase 2 tariff amendment.⁴⁵

The CAISO believes that this robust process has led to an amendment that best reflects the needs of all parties to the interconnection process, including both small and large generator developers, transmission owners, and California ratepayers.

IV. Effective Date

The CAISO requests that the Commission accept the tariff revisions contained in this GIP Phase 2 tariff amendment effective 62 days after the date of this filing, *i.e.*, January 31, 2012.

Materials related to the CAISO Governing Board's authorization of this tariff amendment are available on the CAISO website at http://www.caiso.com/informed/Pages/BoardCommittees/BoardGovernorsMeetings.aspx.

V. 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:

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VI. Attachments

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

Attachment A Revised CAISO tariff sheets that incorporate the proposed

changes described herein

Attachment B Proposed changes to the CAISO tariff shown in black-line

format

Attachment C Table of GIP Phase 2 Changes

Attachment D Revised Draft Final Proposal

Attachment E Addendum to Revised Draft Final Proposal

Attachment F Memorandum to the CAISO Governing Board

Attachment G CAISO Responses to Stakeholder Comments on Draft GIP

Phase 2 Changes

Attachment H List of key dates in the stakeholder process

VII. Service

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

VIII. Conclusion

For the foregoing reasons, the Commission should accept the proposed tariff changes contained in this filing effective as of January 31, 2012, as requested by the CAISO. Please contact the undersigned if you have any questions regarding this matter.

Respectfully submitted,

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Counsel for the California Independent System Operator Corporation

Attachment A – CleanTariff Generator Interconnection Procedures Phase II Tariff Amendment California Independent System Operator Corporation Fifth Replacement FERC Electric Tariff November 30, 2011

* * *

24.4.6.5 LGIP Network Upgrades

Beginning with the 2011/2012 planning cycle, Network Upgrades originally identified during the Phase II Interconnection Study or Interconnection Facilities Study Process of the Large Generation Interconnection Process as set forth in Section 7 of Appendix Y that are not already included in a signed LGIA may be assessed as part of the comprehensive Transmission Plan if these Network Upgrades satisfy the following criteria:

- (a) The Network Upgrades consist of new transmission lines 200 kV or above, and have capital costs of \$100 million or greater;
- (b) The Network Upgrade is a new 500 kV substation that has capital costs of \$100 million or greater; or,
- (c) The Network Upgrades have a capital cost of \$200 million or more.

The CAISO will post a list of the Network Upgrades eligible for assessment in the Transmission Planning Process in accordance with the schedule set forth in the applicable Business Practice Manual. Network Upgrades included in the comprehensive Transmission Plan may include additional components not included in the Network Upgrades originally identified during the Phase II Interconnection Study or may be expansions of the Network Upgrades originally identified during the Phase II Interconnection Study if the CAISO determines during the Transmission Planning Process that such components or expansions are needed as additional elements under section 24.1. Network Upgrades identified in the LGIP Phase II studies but not assessed in the Transmission Planning Process will be included in Large Generator Interconnection Agreements, as appropriate. Network Upgrades assessed in the Transmission Planning Process but not modified or replaced will be included in Large Generator Interconnection Agreements, as appropriate. Construction and ownership of Network Upgrades specified in the comprehensive Transmission Plan under this section, including any needed additional components or expansions, will be the responsibility of the Participating TO if the Phase II studies identified the original upgrade as needed and such upgrade has not yet been set forth in an executed Large Generator Interconnection Agreement. To the extent that additional components or expansions to Network Upgrades remain the responsibility of the Participating TO and such Network Upgrades are subsequently abandoned, the Participating TO shall be presumed to be eligible, subject to prudency and any other applicable review by FERC, to include in its TRR the costs of such Network Upgrades if the costs attributable to the abandonment of such Network Upgrades (as modified, replaced or otherwise reconfigured in the Transmission Planning Process) exceed the amounts funded by Interconnection Customers pursuant to Appendix Y. This presumption shall not apply in the case of Network Upgrades which the applicable Participating TO agreed to up-front fund independent of any obligation to fund pursuant to the Transmission Planning Process. If, through the Transmission Planning Process, the CAISO identifies any additional components or expansions of Network Upgrades that result in the need for other upgrades or additions, the responsibility to build and own such additions or upgrades will be determined by this Section 24, according to the category of those other upgrades or additions. Any decision in the Transmission Planning Process to modify Network Upgrades identified in the Large Generator Interconnection Process will not increase the cost responsibility of the Interconnection Customer as described in Appendix Y, Section 7. Category 1 policydriven elements identified under Section 24.4.6.7 could supplant the need for LGIP Network Upgrades that would be developed in subsequent Generator Interconnection Process cycles. To the extent that a Category 1 policy-driven element eliminates or downsizes the need for a Network Upgrade, the Interconnection Customer's cost responsibility for such Network Upgrade shall be eliminated or reduced. Any financial security posting shall be adjusted accordingly.

* * *

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;
- (d) each existing 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; and
- (e) each existing Generating Unit that is a Qualifying Facility and that is converting to
 a Participating Generator without repowering or reconfiguring the existing
 Generating Unit, subject to Section 25.1.2.

The CAISO shall be authorized to verify whether the requirements of Section 25.1(b), (c), (d), and (e) apply to each existing Generating Unit, and the owner of the existing Generating Unit, or its designee, shall be responsible for any costs related to that verification process pursuant to the Business Practice Manual. The CAISO may engage the services of the applicable Participating TO in the ISO's conducting such verification activities, in which case such costs shall be borne by the such party making the request under Section 25.1, and such costs shall be included in any CAISO invoice for verification activities.

* * *

37.9.4 Disposition Of Proceeds

The CAISO shall collect penalties assessed pursuant to this Section 37.9 and deposit such amounts in an interest bearing trust account. After the end of each calendar year, the CAISO shall distribute the penalty amounts together with interest earned through payments to Scheduling Coordinators as provided herein. For the purpose of this Section 37.9.4, "eligible Market Participants" shall be those Market Participants that were not assessed a financial penalty pursuant to this Section 37 during the calendar year.

Each Scheduling Coordinator that paid GMC during the calendar year will identify, in a manner to be specified by the CAISO, the amount of GMC paid by each Market Participant for whom that Scheduling Coordinator provided service during that calendar year. The total amount assigned to all Market Participants served by that Scheduling Coordinator in such calendar year (including the Scheduling Coordinator itself for services provided on its own behalf), shall equal the total GMC paid by that Scheduling Coordinator.

The CAISO will calculate the payment due each Scheduling Coordinator based on the lesser of the GMC actually paid by all eligible Market Participants represented by that Scheduling Coordinator, or the product of a) the amount in the trust account, including interest, and b) the ratio of the GMC paid by each Scheduling Coordinator for eligible Market Participants, to the total of such amounts paid by all Scheduling Coordinators. Each Scheduling Coordinator is responsible for distributing payments to the eligible Market Participants it represented in proportion to GMC collected from each eligible Market Participant.

Prior to allocating the penalty proceeds, the CAISO will obtain FERC's approval of its determination of eligible Market Participants and their respective shares of the trust account proceeds. If the total amount in the trust account to be so allocated exceeds the total GMC obligation of all eligible Market Participants, then such excess shall be treated in accordance with Section 11.29.9.6.3.

* * *

Appendix A

Master Definitions Supplement

* * *

- Partial Deliverability Status

The condition whereby a Large Generating Facility interconnected with the CAISO Controlled Grid can deliver an elected amount of output that is less than the full output of the Large Generating Facility to the aggregate of Load on the CAISO Controlled Grid, consistent with the CAISO's Reliability Criteria and procedures and the CAISO On-Peak Deliverability Assessment.

* * *

Appendix T

Small Generator Interconnection Agreement

* *

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

5.3.1.1 Repayment of Amounts Advanced Regarding Non-Phased Generating Facilities

Upon the Commercial Operation Date of a Generating Facility that is not a Phased Generating Facility, 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-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 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.

5.3.1.2 Repayment of Amounts Advanced Regarding Phased Generating Facilities

Upon the Commercial Operation Date of each phase of a Phased Generating Facility, the Interconnection Customer shall be entitled to a repayment equal to the amount paid to the Participating TO for the cost of Network Upgrades for that completed phase for which the Interconnection Customer is responsible, if all of the following conditions are satisfied:

- (a) The Generating Facility is capable of being constructed in phases;
- (b) The Generating Facility is specified in the SGIA as being constructed in phases;
- (c) The completed phase corresponds to one of the phases specified in the SGIA;
- (d) The Interconnection Customer has tendered notice pursuant to the SGIA that the phase has achieved Commercial Operation;
- (e) All parties to the SGIA have agreed that the completed phase meets the requirements set forth in the SGIA and any other operating, metering, and interconnection requirements to permit generation output of the entire capacity of the completed phase as specified in the SGIA;
- (f) The Network Upgrades necessary for the completed phase to meet the desired level of deliverability are in service; and
- (g) The Interconnection Customer has posted one hundred (100) percent of the Interconnection Financial Security required for the Network Upgrades for all the phases of the Generating Facility.

Upon satisfaction of these conditions (a) through (g), the Interconnection Customer shall be entitled to receive a partial repayment of its financed cost responsibility in an amount equal to the percentage of the Generating Facility declared to be in Commercial Operation multiplied by the cost of the Network Upgrades associated with the completed phase. The Interconnection Customer shall be entitled to repayment in this manner for each completed phase until the entire Generating Facility is completed.

If the SGIA includes a partial termination provision and the partial termination right has been exercised with regard to a phase that has not been built, then the Interconnection Customer's eligibility for repayment under this Article as to the remaining phases shall not be diminished. If the Interconnection Customer completes one or more phases and then defaults on the SGIA, the Participating TO and the CAISO shall be entitled to offset any losses or damages resulting from the default against any repayments made for Network Upgrades related to the completed phases, provided that the party seeking to exercise the offset has complied with any requirements which may be required to apply the stream of payments utilized to make the repayment to the Interconnection Customer as an offset.

Any repayment amount for completion of a phase 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-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 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.

5.3.1.3 Interest Payments and Assignment Rights

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.

5.3.1.4 Failure to Achieve Commercial Operation

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.

* * *

Attachment 1

Glossary Of Terms

* * *

Phased Generating Facility – A Generating Facility that is structured to be completed and to achieve Commercial Operation in two or more successive sequences that are specified in this SGIA, such that each sequence comprises a portion of the total megawatt generation capacity of the entire Generating Facility.

* * *

Attachment 7

INTERCONNECTION REQUIREMENTS FOR AN ASYNCHRONOUS GENERATING FACILITY

Attachment 7 sets forth requirements and provisions specific to all Asynchronous Generating Facilities. All other requirements of this Agreement continue to apply to Asynchronous Generating Facility interconnections.

A. Technical Standards Applicable to Asynchronous Generating Facilities Asynchronous Generating Facilities

i. Low Voltage Ride-Through (LVRT) Capability

An Asynchronous Generating Facility shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the requirements below.

- 1. An Asynchronous Generating Facility shall remain online for the voltage disturbance caused by any fault on the transmission grid, or within the Asynchronous Generating Facility between the Point of Interconnection and the high voltage terminals of the Asynchronous Generating Facility's step up transformer, having a duration equal to the lesser of the normal three-phase fault clearing time (4-9 cycles) or one-hundred fifty (150) milliseconds, plus any subsequent post-fault voltage recovery to the final steady-state post-fault voltage. Clearing time shall be based on the maximum normal clearing time associated with any three-phase fault location that reduces the voltage at the Asynchronous Generating Facility's Point of Interconnection to 0.2 per-unit of nominal voltage or less, independent of any fault current contribution from the Asynchronous Generating Facility.
- 2. An Asynchronous Generating Facility shall remain online for any voltage disturbance caused by a single-phase fault on the transmission grid, or within the Asynchronous Generating Facility between the Point of Interconnection and the high voltage terminals of the Asynchronous Generating Facility's step up transformer, with delayed clearing, plus any subsequent post-fault voltage recovery to the final steady-state post-fault voltage. Clearing time shall be based on the maximum backup clearing time associated with a single point of failure (protection or breaker failure) for any single-phase fault location that reduces any phase-to-ground or phase-to-phase voltage at the Asynchronous Generating Facility's Point of Interconnection to 0.2 per-unit of nominal voltage or less, independent of any fault current contribution from the Asynchronous Generating Facility.
- Remaining on-line shall be defined as continuous connection between the Point of Interconnection and the Asynchronous Generating Facility's units, without any mechanical isolation. Asynchronous Generating Facilities may cease to inject current into the transmission grid during a fault.

- 4. The Asynchronous Generating Facility is not required to remain on line during multi-phased faults exceeding the duration described in Section A.i.1 of this Appendix H or single-phase faults exceeding the duration described in Section A.i.2 of this Appendix H.
- 5. The requirements of this Section A.i. of this Appendix H do not apply to faults that occur between the Asynchronous Generating Facility's terminals and the high side of the step-up transformer to the high-voltage transmission system.
- 6. may be tripped after the fault period if this action is intended as part of a special protection system.
- 7. Asynchronous Generating Facilities may meet the requirements of this Section A.i of this Appendix H through the performance of the generating units or by installing additional equipment within the Asynchronous Generating Facility, or by a combination of generating unit performance and additional equipment.
- 8. The provisions of this Section A.i of this Appendix H apply only if the voltage at the Point of Interconnection has remained within the range of 0.9 and 1.10 per-unit of nominal voltage for the preceding two seconds, excluding any sub-cycle transient deviations.

ii. Frequency Disturbance Ride-Through Capacity

An Asynchronous Generating Facility shall comply with the off nominal frequency requirements set forth in the WECC Under Frequency Load Shedding Relay Application Guide or successor requirements as they may be amended from time to time.

iii. Power Factor Design and Operating Requirements (Reactive Power)

An Asynchronous Generating Facility 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 SLGIA 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 Asynchronous Generating Facility is in operation. Asynchronous Generating Facilities 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

iv. Supervisory Control and Data Acquisition (SCADA) Capability

An Asynchronous Generating Facility 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 Asynchronous Generating Facility Interconnection Customer shall determine what SCADA information is essential for the proposed Asynchronous Generating Facility, taking into account the size of the plant and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability.

v. Power System Stabilizers (PSS)

Power system stabilizers are not required for Asynchronous Generating Facilities.

* * *

Appendix Y

For Interconnection Requests

Generator Interconnection Procedures (GIP)

* * *

Generator

Interconnection Procedures (GIP)

Table of Contents

* * *

6 GENERATOR INTERCONNECTION STUDY PROCESS AGREEMENT

* * *

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

"Phased Generating Facility" shall mean a Generating Facility that is structured to be completed and to achieve Commercial Operation in two or more successive sequences that are specified in a GIA, such that each sequence comprises a portion of the total megawatt generation capacity of the entire Generating Facility.

* * *

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, the elected output of a

Generating Facility seeking Partial 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.

All cost estimates for Interconnection Facilities and Network Upgrades contained in Interconnection Studies will be set forth in the Interconnection Study report in present dollar costs as well as time-adjusted dollar costs, adjusted to the estimated year of construction of the components being constructed.

* * *

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, or are in the CAISO's third Queue Cluster, 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, or are in the CAISO's third Queue Cluster, 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.

* * *

3.6 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 (such posted information to be placed on the secure CAISO Website to protect any Critical Energy Infrastructure Information contained therein). The CAISO shall post to the secure CAISO Website any documents or other materials posted pursuant to this GIP or a Business Practice Manual that contain Critical Energy Infrastructure Information.

* * *

4.2.1 Flow Impact Test

An Interconnection Request shall have satisfied the requirements of this Section if it satisfies, alternatively, either the set of requirements set forth in GIP Section 4.2.1.1 or the set of requirements set forth in GIP Section 4.2.1.2.

4.2.1.1 Requirement Set Number One General Independent Study Requests:

the CAISO, in coordination with the applicable Participating TO(s), will perform the flow impact test for an 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.

4.2.1.2 Requirement Set Number Two: for Requests for Independent Study of Behind-the-Meter Expansion for Solar and Wind Technologies

> This GIP Section 4.2.1.2 applies to an Interconnection Request relating to a behind-themeter expansion where the existing Generating Facility prime mover is wind technology or solar technology. Such an Interconnection Request submitted under the Independent Study Process will satisfy the requirements of GIP Section 4.2.1 if it satisfies all of the following technical and business criteria for behind-the-meter capacity expansion of a Generating Facility:

- (i) Technical criteria.
 - The total nameplate capacity of the existing Generating Facility plus the incremental increase in capacity does not exceed in the aggregate one hundred twenty-five (125) percent of its previously studied capacity and does not exceed, in the aggregate, one hundred (100) MW.
 - The behind-the-meter capacity expansion shall not take place until after the original Generating Facility has achieved Commercial Operation and all Network Upgrades for the original Generating Facility have been placed in service.
 - The expanded capacity for the Generating Facility has been placed under a separate breaker (the expansion breaker) such that the expansion can be metered separately at all times.
 - Unless specifically requested by the CAISO, the total output of the Generating Facility does not exceed its originally studied capacity at any time. The CAISO will have the authority to trip the expansion breaker if the total output of the Generating Facility exceeds the originally studied capacity.
 - The processing of an Interconnection Request for behind-the-meter expansion under the Independent Study Process shall not result in any increase in the rated Generating Facility electrical output (MW capacity) beyond the rating which pre-existed the Interconnection Request. Further, the processed Interconnection Request shall not operate as a basis under the CAISO Tariff to increase the Net Qualifying Capacity of the Generating Facility beyond the rating which pre-existed the Interconnection Request.
- (ii) Business criteria.
 - The Deliverability Status (Full Capacity, Partial Deliverability or Energy-Only) of the capacity expansion is the same as the Deliverability Status specified for the formally studied Generating Facility.
 - The GIA is amended to reflect the revised operational features of the Generating Facility capacity expansion.
 - The Interconnection Customer may at any time request that the CAISO convert the Interconnection Request for behind-the-meter expansion to an Independent Study Process Interconnection Request to evaluate an incremental increase in electrical output (MW generating capacity) for the existing Generating Facility. The Interconnection Customer must accompany such a conversion request with an appropriate Interconnection Study Deposit and agree to comply with other sections of GIP Section 4 applicable to an Independent Study Process Interconnection Request.

* * *

4.6 Deliverability Assessment

Interconnection Customers under the Independent Study Process that requests Partial or 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 (or increase in capacity of an existing 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 (or increase in capacity) will be treated as an Energy-Only Deliverability Status Generating Facility until such Delivery Network Upgrades are in service.

* * *

5.1 Applicability and Initiation of Fast Track Process Request

Applicability to a proposed Generating Facility. 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 is requesting Energy-Only Deliverability Status 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.

Applicability to an existing Generating Facility. If the Interconnection of an existing Generating Facility meets the qualifications for Interconnection under CAISO Tariff Section 25.1(d) or (e) but, at the same time, the Interconnection Customer also seeks to repower or reconfigure the existing Generating Facility in a manner that increases the gross generating capacity by not more than 5 MW, then the Interconnection Customer may request that the Fast Track Process be applied with respect to the repowering or reconfiguration of the existing Generating Facility that results in the incremental increase in MW.

<u>Initiating the Fast Track Interconnection Request.</u> 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.

* * *

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 Deliverability Assessment and Off-Peak Deliverability Assessment (which will be for informational purposes only beginning with the Phase II Interconnection Study for Queue Clusters 3 and 4), 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).

* * *

6.5.2 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 or Partial 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 or Partial 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 or Partial 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 or Partial Deliverability Status to meet the requirements for deliverability. Deliverability requires that the Generating Facility Capacity, or the portion of Generating Facility Capacity designated for Partial Deliverability, 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 or Partial 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 or Partial 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 to identify transmission upgrades in addition to those Delivery Network Upgrades 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.

The transmission upgrades identified under this Section shall comprise those needed for 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, to be 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.

Beginning with the Phase II Interconnection Study for Queue Clusters 3 and 4, the ISO will perform the Off-Peak Deliverability Assessment performed under this Section 6.5.2.2 for Interconnection Customer informational purposes only, and any Delivery Network Upgrades identified in the assessment will be referred to as "off peak deliverability transmission upgrades," the description of such upgrades in any report will be conceptual in nature, and such transmission upgrades will not be included in a plan of service within the applicable Interconnection Study report.

The cost of all transmission upgrades identified in the Off-Peak Deliverability Assessment performed during the course of the Phase I Interconnection Study shall be estimated in accordance with GIP Section 6.6. However, because these transmission upgrades shall be conceptual in nature only (as of the Phase II Interconnection Study for Clusters 3 and 4), then, beginning with that study, the transmission upgrades identified in this Section 6.5.2.2 shall be treated as follows:

- these transmission upgrades will not be required for the proposed Generating Facility (or proposed increase in capacity) that is the subject to the Interconnection Request to achieve Full Capacity Deliverability Status;
- (ii) the estimated costs for these transmission upgrades shall not be assigned to any Interconnection Customer in an Interconnection Study report, such costs shall not be considered in determining the cost responsibility or maximum cost responsibility of the Interconnection Customer for Network Upgrades under this GIP or in determining the Interconnection Financial Security than an Interconnection Customer must post under Section 9:
- (iii) and the applicable Participating TO(s) shall not be responsible under this GIP for financing or constructing such transmission upgrades.

6.7 Effect of Phase I Study Cost Estimates

Until such time as the Phase II Interconnection Study report is issued to the Interconnection Customer, 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, as well as the maximum value for each Interconnection Customer's total cost responsibility for Network Upgrades. As set forth in Section 9.5 of this GIP, after issuance of the Phase II Interconnection Study, the Interconnection Customer's Interconnection Financial Security obligations and maximum cost responsibility for Network Upgrades will be based on the lesser of the cost estimates set forth in the Phase I and Phase II Interconnection Studies.

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 issue 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 issuing 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.

Should the Interconnection Customer provide written comments on the final Phase I Interconnection Study report within ten (10) Business Days of receipt of the report, but in no event less than three (3) Business Days before the Results Meeting conducted to discuss the report, whichever is sooner, the ISO will address the written comments in the Phase I Interconnection Study Results Meeting. Should the Interconnection Customer provide comments at any later time (up to the time of the Results Meeting), then such comments shall be considered informal inquiries to which the CAISO will provide informal, informational responses at the Results Meeting, to the extent possible.

The Interconnection Customer may submit, in writing, additional comments on the final Phase I Interconnection Study report up to (3) Business Days following the Results

Meeting. Based on any discussion at the Results Meeting and any comments received, the CAISO (in consultation with the applicable Participating TO(s)) will determine, in accordance with Section 6.10 of this GIP, whether it is necessary to follow the final Phase I Interconnection Study report with a revised study report or an addendum. I The CAISO will issue any such revised report or addendum to the Interconnection Customer no later than fifteen (15) Business Days following the Results Meeting.

* * *

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 issuance 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.

6.9.3 Confirmation of Deliverability Status

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 the 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 as follows:

- (a) from Full Capacity Deliverability Status to Energy-Only Deliverability Status;
- (b) from Full Capacity Deliverability Status to Partial Deliverability Status with a specified Partial Deliverability level in MW;
- (c) from Partial Deliverability Status to Energy-Only Deliverability Status; or
- (d) reduce the level of Partial Deliverability Status in MW.

6.9.4 Determination of Impact of Modifications Decreasing Generating Capacity Output or Deliverability Status Reductions on Calculation of Initial Financial Security Posting

After receiving from the Interconnection Customer any modification elections involving decreases in electrical output (MW) of the Generating Facility and/or changes (*i.e.*, reductions) in deliverability status as permitted in Section 6.9.3 above, the CAISO, in coordination with the applicable Participating TO(s), will determine, based on best engineering judgment, whether such modifications will eliminate the need for any Delivery Network Upgrades identified in the Phase I Interconnection Study report. The CAISO and applicable Participating TO(s) will not conduct any re-studies in making this determination.

If the CAISO and applicable Participating TO(s) should determine that one or more Delivery Network Upgrades identified in the Phase I Interconnection Study are no longer needed, then, solely for purposes of calculating the amount of the Interconnection Customer's initial Financial Security Posting under Section 9.2, such Delivery Network Upgrade(s) will be considered to be removed from the plan of service described in the Interconnection Customer's Phase I Interconnection Study report and the cost estimates for such upgrades shall not be included in the calculation of Interconnection Financial Security in Section 9.2. The CAISO will inform in a timely manner any Interconnection Customers so affected, and provide the Interconnection Customers with written notice of the revised initial Interconnection Financial Security posting amounts. No determination under this Section 6.9.4 shall affect either (i) the timing for the initial Interconnection Financial Security posting or (ii) the maximum value for the Interconnection Customer's total cost responsibility for Network Upgrades established by the Phase I Interconnection Study report.

6.10 Revisions and Addenda to Final Interconnection Study Reports

6.10.1 Substantial Error or Omissions; Revised Study Report

Should the CAISO discover, through written comments submitted by an Interconnection Customer or otherwise, that a final Phase I or Phase II Interconnection Study Report

(which can mean a final Phase I or Phase II Interconnection Study Report for cluster studies or a final System Impact or Facilities report for the Independent Study Process) contains a substantial error or omission, the CAISO will cause a revised final report to be issued to the Interconnection Customer. A substantial error or omission shall mean an error or omission that results in one or more of the following:

- (i) understatement of the Interconnection Customer's cost responsibility for either Network Upgrades or Participating TO Interconnection Facilities by more than five (5) percent or one million dollars (\$1,000,000), whichever is greater; or
- (ii) overstatement of the Interconnection Customer's cost responsibility for either Network Upgrades or Participating TO Interconnection Facilities of more than twenty (20) percent; or
- (iii) results in a delay to the schedule by which the Interconnection Customer can achieve Commercial Operation, based on the results of the final Interconnection Study, by more than one year.

A dispute over the plan of service by an Interconnection Customer shall not be considered a substantial error or omission unless the Interconnection Customer demonstrates that the plan of service was based on an invalid or erroneous study assumption that meets the criteria set forth above.

6.10.2 Other Errors or Omissions; Addendum

If an error or omission in an Interconnection Study report (for either the cluster process or Independent Study Process) is not a substantial error or omission, the CAISO shall not issue a revised final Interconnection Study report, although the error or omission may result in an adjustment of the corresponding Interconnection Financial Security. Rather, the CAISO shall document such error or omission and make any appropriate correction by issuing an addendum to the final report.

The CAISO and applicable Participating TO shall also incorporate, as needed, any corrected information pertinent to the terms or conditions of the GIA in the draft GIA provided to an Interconnection Customer pursuant to Section 11 of this GIP.

6.10.3 Only Substantial Errors or Omissions Adjust Posting Dates

Unless the error or omission is a substantial error resulting in the issuance of a revised final Interconnection Study report, the correction of an error or omission shall not operate to delay any deadline for posting Interconnection Financial Security set forth in Section 9 of this GIP. In the case of a substantial error or omission resulting in the issuance of a revised final Phase I or Phase II Interconnection Study report, the deadline for posting Interconnection Financial Security shall be extended as set forth in GIP Section 9. In addition to issuing a revised final report, the CAISO will promptly notify the Interconnection Customer of any revised posting amount and extended due date occasioned by a substantial error or omission.

An Interconnection Customer's dispute of a CAISO determination that an error or omission in a final Study report does not constitute substantial error shall not operate to change the amount of Interconnection Financial Security that the Interconnection Customer must post or to postpone the applicable deadline for the Interconnection Customer to post Interconnection Financial Security. In case of such a dispute, the Interconnection Customer shall post the amount of Interconnection Financial Security in accordance with Section 9 of this GIP, subject to refund in the event that the Interconnection Customer prevails in the dispute.

* * *

7.1 Scope Of Phase II Interconnection Study

The CAISO, in coordination with the applicable Participating TO(s), will conduct a Phase II Interconnection Study that will incorporate eligible Interconnection Requests from the previous two Phase I Interconnection Studies. Beginning with Queue Cluster 5, the Phase II Interconnection Study will incorporate eligible Interconnection Requests from the previous Phase I Interconnection Study. 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.

The CAISO will perform an operational partial and interim Deliverability Assessment (operational Deliverability Assessment) as part of the Phase II Interconnection Study. The operational Deliverability Assessment will be performed for each applicable queue cluster study group for each applicable study year through the prior year before all of the required Delivery Network Upgrades are in-service. The CAISO will consider operational Deliverability Assessment results stated for the first year in the pertinent annual Net

Qualifying Capacity process that the CAISO performs for the next Resource Adequacy Compliance Year. The study results for any other years studied in operational Deliverability Assessment will be advisory and provided to the Interconnection Customer for its use only and for informational purposes only.

The CAISO will publish the methodology under which the CAISO will perform the operational deliverability assessment on the ISO Website or within a Business Practice Manual.

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 or Partial 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.

Beginning with the Phase II Interconnection Study for Clusters 3 and 4, any transmission upgrades identified in the Off-Peak Deliverability Assessment as part of the Phase II Interconnection Study, and the estimated costs thereof, shall be conceptual in nature only, and therefore, commencing with that study, the estimated costs of transmission upgrades identified in the Off-Peak Deliverability Assessment shall not be assigned to any Interconnection Customers in an Interconnection Study report, such costs shall not be considered in determining the cost responsibility or maximum cost responsibility of the Interconnection Customer for Network Upgrades under this GIP, and the applicable Participating TO(s) shall not be responsible under this GIP for financing or constructing such transmission upgrades.

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 issue 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.

7.7 Results Meeting With The CAISO And Applicable PTO(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.

Should the Interconnection Customer provide written comments on the final Phase II Interconnection Study report within ten (10) Business Days of receipt of the report, but in no case less than three (3) Business Days before the Results Meeting, whichever is sooner, then the ISO will address the written comments in the Phase II Interconnection Study Results Meeting. Should the Interconnection Customer provide comments at any later time (up to the time of the Results Meeting), then such comments shall be considered informal inquiries to which the CAISO will provide informal, informational responses at the Results Meeting, to the extent possible.

The Interconnection Customer may submit, in writing, additional comments on the final Phase II Interconnection Study report up to three (3) Business Days following the Results Meeting. Based on any discussion at the Results Meeting and any comments received, the CAISO (in consultation with the applicable Participating TO(s)) will determine, in accordance with Section 6.10 of this GIP, whether it is necessary to follow the final Phase II Interconnection Study Report with a revised study report or an addendum to the report. The CAISO will issue any such revised report or addendum no later than fifteen (15) Business Days following the Results Meeting.

8.3 PTO Tariff Option for Full Capacity Deliverability Status

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 CAISO 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.

8.4 Deliverability from Non-Participating TOs

This process applies to Generating Facilities that interconnect to the transmission facilities of a Non-Participating TO located within the CAISO Balancing Authority Area that wish to obtain Full Capacity Deliverability Status under the CAISO Tariff. Such Generating Facilities will be eligible to be studied by the CAISO for Full Capacity Deliverability Status pursuant to the following provisions:

- (a) The Generating Facility seeking Full Capacity Deliverability Status under the CAISO Tariff must submit a request to the CAISO to study it for such Status. Such study request will be in the form of the CAISO's pro forma Interconnection Request, must include the Generating Facility's intended Point of Delivery to the CAISO Controlled Grid, and must be submitted during a Cluster Application Window. The Generating Facility will be required to satisfy the same study deposit and Interconnection Financial Security posting requirements as an Interconnection Customer, but will not be considered an Interconnection Customer under the CAISO Tariff.
- (b) The Non-Participating TO that serves as the interconnection provider to the Generating Facility must treat the CAISO as an Affected System in the interconnection study process for the Generating Facility.
- (c) As part of the Non-Participating TO's interconnection study process, the CAISO, in its sole discretion and on a case-by-case basis, will determine the adequacy of transmission on the Non-Participating TO's system for the Generating Facility to be deemed fully deliverable to the elected Point of Delivery to the CAISO Controlled Grid. Only those proposed Generating Facilities (or proposed increases in Generating Facility capacity) for which the CAISO has determined there is adequate transmission capacity on the Non-Participating TO system to provide full deliverability to the applicable Point of Delivery will be eligible to be assessed for Full Capacity Deliverability Status under the CAISO Tariff.
- (d) If the Generating Facility is eligible for study for Full Capacity Deliverability Status, the CAISO will include the Generating Facility in the Interconnection Study process for the Queue Cluster associated with the Cluster Application Window in which the Generating Facility has submitted its study request. The Point of Delivery with the CAISO will be treated as the Point of Interconnection for purposes of including the Generating Facility in a Group Study with any applicable CAISO Interconnection Customers in the relevant Queue Cluster. Pursuant to the Queue Cluster Interconnection Study process, as set forth in this GIP, the Generating Facility will be allocated its share of any applicable Delivery Network Upgrades.
- (e) The CAISO, Participating TO, and Interconnection Customer will execute any necessary agreements for reimbursement of study costs incurred it to assure cost attribution for any Network Upgrades relating to any deliverability status conferred to each such interconnection customer under the Non-Participating TO's tariff.
- (f) The Non-Participating TO's interconnection customer will receive repayment of funds posted for the construction of the Delivery Network Upgrades on the CAISO Controlled Grid in the same manner as CAISO Interconnection Customers, as specified in GIP Section 12.3.2.

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 issuance 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.

Revised Cluster Study Reports. If the CAISO revises a final Phase I Interconnection Study report pursuant to GIP Section 6.10, the initial postings set forth in this GIP Section 9.2 will be due from the Interconnection Customer by the later of ninety (90) calendar days after issuance of the original final Phase I Interconnection Study Report or forty (40) calendar days after issuance of the revised final Phase I Interconnection Study Report.

Revised Independent Study Track Reports. If the CAISO revises a final System Impact Study report pursuant to GIP Section 6.10, the initial postings set forth in this GIP Section 9.2 will be due from the Interconnection Customer by the later of ninety (90) calendar days after issuance of the original final System Impact report or thirty (30) calendar days after issuance of the revised System Impact Study report.

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- **9.2.4** Posting Amount for Participating TO's Interconnection Facilities.
- 9.2.4.1 For Small Generating Facilities. 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 (15) percent of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Participating TO's Interconnection Facilities 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.
- 9.2.4.2 For Large Generating Facilities. 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 (15) percent of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Participating TO's Interconnection Facilities, (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.
- 9.2.4.3 Cost Estimates Less than Minimum Posting Amounts. If the costs of the estimated Participating TO Interconnection Facilities for either a Small Generating Facility or Large Generating Facility are less than the minimum posting amounts that would apply under Sections 9.2.4.1 or 9.2.4.2, then the posting amount required will be equal to the estimated Participating TO Interconnection Facilities amount.
- 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.

9.2.6 Effect of Decrease in Output on Initial Posting Requirement. If an Interconnection Customer decreases the electrical output of its facility after the completion of the Phase I Interconnection Study, pursuant to Section 6.9.2, and the CAISO, in consultation with the applicable Participating TO(s), is able to reasonably determine, prior to the date for initial posting of Interconnection Financial Security, that as a result of such decrease (solely or in combination with other modifications made by Interconnection Customers in the same Study Group) some of the Network Upgrades and/or Participating TO Interconnection Facilities identified in the Phase I Interconnection Study will no longer be required, then the calculation of the initial posting of Interconnection Financial Security will not include those Network Upgrades and/or Participating TO Interconnection Facilities. Such determination will be made based on the CAISO's best engineering judgment and will not include any re-studies.

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, except to the extent that the provisions of GIP Section 9.3.3 apply; (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 issuance 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. However, if the CAISO revises a final Phase II Interconnection Study report pursuant to GIP Section 6.10, the postings set forth in this GIP Section 9.3.1.2 will be due from the Interconnection Customer by the later of one hundred-eighty (180) calendar days after issuance of the original final Phase II Interconnection Study report or sixty (60) calendar days after issuance of the revised final Phase II Interconnection Study report. If the CAISO revises the final Facilities Study report pursuant to GIP Section 6.1, the postings set forth in this Section 9.2 will be due by the later of one hundred-twenty (120) calendar days after the issuance of the original final Facilities Study report or thirty (30) calendar days from the issuance of the revised Facilities Study report.

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 (30) percent 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, except to the extent that the provisions of GIP Section 9.3.3 apply. 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 (30)

percent 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, except to the extent that the provisions of GIP Section 9.3.3 apply. 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.

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 Participating TO Interconnection Facilities equals the lesser of (i) \$1 million or (ii) thirty (30) percent 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 Participating TO Interconnection Facilities equals the lesser of (i) \$15 million or (ii) thirty (30) percent 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 Participating TO Interconnection Facilities are less than the minimum posting amounts set forth above, the posting amount required will be equal to the estimated Participating TO Interconnection Facilities amount.

- 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 issuance 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 issuance 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 LGIA Article 2.3 or SGIA Article 3.3, whichever is applicable.

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 (100) percent 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, except to the extent that the provisions of GIP Section 9.3.3 apply. 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 (100) percent 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.

If an Interconnection Customer's Network Upgrades and/or Interconnection Facilities are separated into two or more specific components and/or can be separated into two or more separate and discrete phases of construction and the Participating TO is able to identify and separate the costs of the identified discrete components and/or phases of construction, then the Participating TO, the CAISO, and the Interconnection Customer may negotiate, as part of the Generator Interconnection Agreement, a division of the third Interconnection Financial Security posting into discrete Interconnection Financial Security amounts and may establish discrete milestone dates (however, outside dates must be included) for posting the amounts corresponding to each component and/or phase of construction related to the Network Upgrades and/or Interconnection Facilities described in the Generator Interconnection Agreement.

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 LGIA Article 2.3 or SGIA Article 3.3, whichever is applicable.

9.3.3 Offsets for Network Upgrades Which Participating TOs Elect to Up- Front Fund.

To the extent that the Participating TO unequivocally commits (subject to conditions set forth or to be set forth in a GIA)to up-front fund Network Upgrades for which an Interconnection Customer has been assigned cost responsibility, the Interconnection Customer will be relieved of the obligation to make the second and third postings of Interconnection Financial Security for such Network Upgrades. The Interconnection Customer will remain obligated to make the second and third postings of Interconnection Financial Security for that portion of its assigned Network Upgrades that the Participating TO does not unequivocally (subject to conditions set forth or to be set forth in a GIA) commit to up-front fund.

As a prerequisite for the Participating TO up-front funding commitment to relieve the Interconnection Customer of its posting requirements for the related Network Upgrades, the up-front funding commitment must be conditional upon the Interconnection Customer's meeting milestones for Interconnection Customer development and construction of the Generating Facility as set forth in Appendix B to the LGIA or Attachment 4 to the SGIA, as applicable. Such Interconnection Customer milestones will include, with respect to the proposed Generating Facility or an identified phase of such facility as identified in the LGIA, such events as the securing of Site Exclusivity, posting of

Financial Security under GIP Section 9 for the Interconnection Customer's cost responsibility for Network Upgrades (exclusive of up-front funded amounts) and for the Participating TO's Interconnection Facilities, securing of necessary permits, licenses, and/or property rights required for the construction, selection of applicable engineering, procurement and construction contractors, securing of necessary financing, and such other commercially reasonable milestones as the Participating TO, CAISO, and Interconnection Customer shall consent and agree to (such consent shall not be unreasonably withheld).

If the Participating TO withdraws its contractual commitment to up-front fund the Network Upgrades the Interconnection Customer will be required to post Interconnection Financial Security covering the Network Upgrades for which the Participating TO is withdrawing its up-front funding, within thirty (30) days of the Participating TO's notice to the Interconnection Customer that the up-front funding is being withdrawn.

If the Interconnection Customer's obligation to make the second posting of Interconnection Financial Security arises before the Generator Interconnection Agreement is executed by all parties to that agreement, the Interconnection Customer will be provided an additional thirty (30) days to post any Interconnection Financial Security related to Participating TO up-front funded Network Upgrades. The Interconnection Customer will continue to engage in good faith efforts to complete the negotiation of the Generator Interconnection Agreement during the additional thirty (30) day period. If the Generator Interconnection Agreement is not executed by all parties to that agreement within the additional thirty (30) day period, the Interconnection Customer will then be required to post the remaining Interconnection Financial Security, subject to refund.

If, after execution of the Generator Interconnection Agreement by all parties to that agreement, the Participating TO has made an up-front Network Upgrade funding commitment that is conditioned on a request for abandoned plant approval pending before FERC, the obligation to post the Interconnection Financial Security for Network Upgrades related to the Participating TO up-front funding commitment will be suspended during the pendency of the request before FERC. If FERC issues an order denying the request for abandoned plant approval, the obligation to post the Interconnection Financial Security for Network Upgrades will immediately be reinstated, and the Interconnection Customer will be required to post the Interconnection Financial Security within forty-five (45) days of the issuance of the FERC order unless the parties to the Generator Interconnection Agreement renegotiate that agreement within the forty-five (45) day period to provide for alternative timeframes or methods for funding the posting. Such a renegotiated Generator Interconnection Agreement will be deemed to be conforming to a FERC-accepted standard form of Generator Interconnection Agreement only if it extends the time period for posting the Interconnection Financial Security to a date no later than seventy-five (75) days after the FERC order denying abandoned plant approval was issued or provides for continued Participating TO up-front funding of the Network Upgrades. If the parties to the Generator Interconnection Agreement are unable to renegotiate and execute the Generator Interconnection Agreement within the forty-five (45) day period, the Interconnection Customer must post the Interconnection Financial Security before the close of such time period.

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.

* * *

- 9.4.2 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 (50) percent 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.

* * *

9.5 Maximum Cost Responsibility For Interconnection Customers

For Interconnection Customers in a Queue Cluster, after the CAISO issues the Phase II Interconnection Study report to the Interconnection Customer, the maximum value for the Financial Security required of each Interconnection Customer and the maximum cost responsibility of each Interconnection Customer for Network Upgrades shall be established by the lesser of the costs for Network Upgrades assigned to the Interconnection Customer in the final Phase I Interconnection Study report or the final Phase II Interconnection Study report.

For Interconnection Customers in the Independent Study Process, the maximum value for the Interconnection Customer's Financial Security and the maximum cost responsibility for Network Upgrades shall be established by the lesser of the costs for Network Upgrades assigned to the Interconnection Customer in the final System Impact Study report or final Facilities Study report.

Section 11 Generator Interconnection Agreement (GIA)

* * *

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 one hundred-twenty (120) 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 one hundred-twenty (120) 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 one hundred-twenty (120) 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.

* * *

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.

To the extent that this Section operates to impose upon the applicable Participating TO(s) cost responsibility for financing or construct Network Upgrades (which cost responsibility was previously assigned to Interconnection Customer(s) under GIP Section 7.3 and 7.4) in excess of what is covered by the Interconnection Financial Security posted by such Interconnection Customers, the Participating TO(s) shall be presumed to be eligible, subject to prudency and any other applicable review by FERC, to include such costs in its TRR(s).

* * *

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 LGIA Article 12.1 or SGIA Article 6.1, whichever is applicable, 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 LGIA Article 12.1 or SGIA Article 6.1, whichever is applicable, 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 LGIA Article 12.1 or SGIA Article 6.1, whichever is applicable, 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.

To the extent that this Section operates to impose upon the applicable Participating TO(s) cost responsibility for financing and constructing Network Upgrades (which were previously assigned to Interconnection Customer(s) under GIP Section 7.3 and/or 7.4), in excess of the what is covered by the Interconnection Financial Security posted by such Interconnection Customer(s)), the Participating TO(s) shall be presumed to be eligible, subject to prudency review and any other applicable review by FERC, to include such costs in its TRR(s).

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

12.3.2.1 Repayment of Amounts Advanced Regarding Non-Phased Generating Facilities

Upon the Commercial Operation Date of a Generating Facility that is not a Phased Generating Facility, 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.

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 in accordance with the GIA.

12.3.2.2 Repayment of Amounts Advanced Regarding Phased Generating Facilities

Upon the Commercial Operation Date of each phase of a Phased Generating Facility, the Interconnection Customer shall be entitled to a repayment for the Interconnection Customer's contribution to the cost of Network Upgrades for that completed phase in accordance with the Interconnection Customer's cost responsibility assigned for the phase under GIP Sections 7.3 and 7.4 if all of the following conditions are satisfied:

- (a) The Generating Facility is capable of being constructed in phases;
- (b) The Generating Facility is specified in the GIA as being constructed in phases;
- (c) The completed phase corresponds to one of the phases specified in the GIA;
- (d) The phase has achieved Commercial Operation and the Interconnection Customer has tendered notice of the same pursuant to the GIA;
- (e) All parties to the GIA have confirmed that the completed phase meets the requirements set forth in the GIA and any other operating, metering, and interconnection requirements to permit generation output of the entire capacity of the completed phase as specified in the GIA;
- (f) The Network Upgrades necessary for the completed phase to meet the desired level of deliverability are in service; and
- (g) The Interconnection Customer has posted one hundred (100) percent of the Interconnection Financial Security required for the Network Upgrades for all the phases of the Generating Facility (or if less than one hundred (100) percent has been posted, then all required Interconnection Financial Security instruments to the date of commencement of repayment).

Upon satisfaction of these conditions (a) through (g), the Interconnection Customer shall be entitled to receive a partial repayment of its financed cost responsibility in an amount equal to the percentage of the Generating Facility declared to be in Commercial Operation multiplied by the cost of the Network Upgrades associated with the completed phase. The Interconnection Customer shall be entitled to repayment in this manner for each completed phase until the entire Generating Facility is completed.

A reduction in the electrical output (MW capacity) of the Generating Facility pursuant to Article 5.19.4 of the LGIA shall not diminish the Interconnection Customer's right to repayment pursuant to this GIP Section 12.3.2.2. If the GIA includes a partial termination provision and the partial termination right has been exercised with regard to a phase that has not been built, then the Interconnection Customer's eligibility for repayment under this Section as to the remaining phases shall not be diminished. If the Interconnection Customer completes one or more phases and then defaults on the GIA, the Participating TO and the CAISO shall be entitled to offset any losses or damages resulting from the default against any repayments made for Network Upgrades related to the completed phases provided that the party seeking to exercise the offset has complied with any requirements which may be required to apply the stream of payments utilized to make the repayment to the Interconnection Customer as an offset.

Any repayment amount for completion of a phase shall include any tax gross-up or other tax-related payments associated with the Network Upgrades not refunded to the Interconnection Customer, and 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 date by the requirements of items (a) through (g) above have been fulfilled,; or (2) any alternative payment schedule that associates the completion of Network Upgrades with the completion of particular phases and that is mutually agreeable to the Interconnection Customer and Participating TO.

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 for each phase, or portions thereof that were funded by the Interconnection Customer. Such CRRs would take effect upon the Commercial Operation Date of the phase in accordance with the GIA.

12.3.2.3 Interest Payments and Assignment Rights

Any phased or non-phased repayment pursuant to this GIP Section 12.3.2 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.

* * *

Appendix 1 Interconnection Request INTERCONNECTION REQUEST

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

1.	Facili	The undersigned Interconnection Customer submits this request to interconnect its Generating Facility 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.				
		Annual Deliverability Assessment pursuant to GIP Section 8.				
2.		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.		Requested Deliverability Status is for (check one):				
	_ Fu	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)				
	CI	tial Deliverability for MW of electrical output (For Independent Study Process and Queue uster Process only) ergy Only				
4.		nterconnection Customer provides the following information:				
	a.	Address or location, including the county, of the proposed new Generating Facility site or,				
	a.					
		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;

Maximum net megawatt electrical output (MW): or				
Net 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);			
	Cogeneration (MW)			
	Reciprocating Engine (MW)			
	Biomass (MW)			
	Steam Turbine (MW)			
	Gas Turbine (MW)			
	Wind (MW)			
	Hydro (MW)			
	Photovoltaic (MW)			
	Combined Cycle (MW)			
	Other (please describe):			
Gene	eral description of the equipment configuration (e.g. number, size, type, etc):			
ــا	Draw and In Cawting Date (first data transmission is needed to the facility). Trial			
d.	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	osed Trial Operation Date:			
	osed Commercial Operation Date:			
	·			
Рюрс	osed Term of Service (years):			
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:		
		DUNS Number:		
	f.	Approximate location of the proposed Point of Interconnection (i.e., specify transmission		
		facility interconnection point name, voltage level, and the location of interconnection);		
	g.	Interconnection Customer data (set forth in Attachment A)		
		The Interconnection Customer shall provide to the CAISO the technical data called for in GIP Appendix 1, Attachment A. Three (3) copies are required.		
5.	Applicable deposit amount as specified in the GIP made payable to California ISO. Send check			
		ISO (see section 7 for details) along with the:		
		ndix 1 to GIP (Interconnection Request) for processing.		
	Attac	hment A to Appendix 1 (Interconnection Request Generating Facility Data).		
6.	Evidence of Site Exclusivity as specified in the GIP and name(s), address(es) and contact			
	inforn	nation of site owner(s) (check one):		
		Is attached to this Interconnection Request		
		Deposit in lieu of Site Exclusivity attached, Site Exclusivity will be provided at a later date		
	in acc	cordance with this GIP		
7.	This I	nterconnection Request shall be submitted to the CAISO representative indicated below:		
		New Resource Interconnection		
		California ISO		
		P.O. Box 639014		
		Folsom, CA 95763-9014		

	[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:

Representative of the Interconnection Customer to contact:

8.

* * *

Attachment A Generating Facility Data To GIP Appendix 1

Interconnection Request

GENERATING FACILITY DATA

* * *

7.	Indu	Induction Generator Data:		
	A.	Rated Generator Power Factor at rated load:		
	B.	Moment of Inertia (including prime mover):		
	C.	Do you wish reclose blocking? Yes, No		
		Note: Sufficient capacitance may be on the line now, or in the future, and the generator may self-excite unexpectedly.		
	7a	Wind Generators		
		per of generators to be interconnected pursuant to this Interconnection Request:age Site Elevation: Single Phase Three Phase		
	Field	Volts:		
		Amperes:		
		ring Power (MW):		
		ral Grounding Resistor (If Applicable):		
		or K (Heating Time Constant):		
		Resistance:		
		r Resistance:		
		r Reactance:		
		Reactance:		
		netizing Reactance:		
		Circuit Reactance:		
		ng Current:		
	Temp	perature Rise:		
	Fram	e Size:		
		gn Letter:		
	Read	tive Power Required In Vars (No Load):		
	Read	tive Power Required In Vars (Full Load):		
	Total	Rotating Inertia, H: Per Unit on 100 MVA 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.

* * *

11. Inverter-Based Machines

Number of inverters to be interconnected pursuant to this Interconnection Request:				
Inverter manufacturer, model name, number, and version:				
List of adjustable set points for the protective equipment or software:				
Max design fault contribution current:				
Harmonics Characteristics:				
Start-up requirements:				

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. 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.

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.

* * *

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

* * *

5. Phase II Interconnection Study

5.1 Phase II Interconnection Study Procedures

The Phase II Interconnection Study, as described in GIP Section 7, for the LGIP Transition Cluster shall commence no later than one hundred twenty (120) calendar days after issuance 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.

* * *

6. Interconnection Financial Security

The provisions of GIP Section 9 shall apply to the LGIP Transition Cluster, except that (i) the initial posting of Interconnection Financial Security under GIP 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 issuance 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 GIP 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 GIP 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

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,
Partial Deliverability for MW or
Energy only)

Designation of Deint of Interconnection and configuration to be studied

NOTICE: YOUR CHOICE OF DELIVERABILITY STATUS CAN AFFECT YOUR ABILITY TO QUALIFY YOUR GENERATING FACILITY AS A RESOURCE ADEQUACY RESOURCE OR AFFECT YOUR TRANSACTIONS FOR SALE OF POWER. PLEASE GIVE CONSIDERATION TO YOUR CHOICE OF DELIVERABILITY STATUS

Appendix 4 Agreement for Allocating GIP and Study Responsibilities

* * *

ATTACHMENT B

CONTACTS FOR NOTICES

[Section 4.15]

California ISO

Manager, Transmission Engineering 250 Outcropping Way Folsom, CA 95630

Phone: 916.351.2104 Fax: 916.351.2264

[NAME OF PTO]

[Address of PTO]

Appendix 6

* * *

Appendix A Assumptions in System Impact Study 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, Partial Deliverability, or Energy-Only)

* * *

CAISO TARIFF APPENDIX CC

Large Generator Interconnection Agreement

for Interconnection Requests in a Queue Cluster Window

that are tendered a Large Generator Interconnection Agreement on or after July 3, 2010

* * *

Article 1. Definitions

* * *

Phased Generating Facility shall mean a Generating Facility that is structured to be completed and to achieve Commercial Operation in two or more successive sequences that are specified in this LGIA, such that each sequence comprises a portion of the total megawatt generation capacity of the entire Generating Facility.

* * *

ARTICLE 5. INTERCONNECTION FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION

* * *

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.

Network Upgrades common to multiple Generating Facilities, and to which the Interconnection Customer's right of suspension shall not extend, consist of Network Upgrades identified for:

- (i) Generating Facilities which are the subject of all Interconnection Requests made prior to the Interconnection Customer's Interconnection Request;
- (ii) Generating Facilities which are the subject of Interconnection Requests within the Interconnection Customer's queue cluster; and
- (iii) Generating Facilities that are the subject of Interconnection Requests that were made after the Interconnection Customer's Interconnection Request but no later than the date on which the Interconnection Customer's Phase II Study Report is issued, and have been modeled in the Base Case at the time the Interconnection Customer seeks to exercise its suspension rights under this Section.

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 Article 2.4. 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.

* * *

5.19.4 Permitted Reductions in output capacity (MW generating capacity) of the Generating Facility. An Interconnection Customer may reduce the MW capacity of the Generating Facility by up to five percent (5%) for any reason, during the time period between the Effective Date of this LGIA and the Commercial Operation Date. The five percent (5%) value shall be established by reference to the MW generating capacity as set forth in the "Interconnection Customer's Data Form To Be Provided by the Interconnection Customer Prior to Commencement of the Phase II Interconnection Study" (Appendix B to Appendix 3 of the GIP).

The CAISO (in consultation with the applicable Participating TO(s) will consider an Interconnection Customer's request for a reduction in the MW generating capacity greater than five percent (5%) under limited conditions where the Interconnection Customer reasonably demonstrates to the Participating TO and CAISO that the MW generation capacity reduction is warranted due to reasons beyond the control of the Interconnection Customer. Reasons beyond the control of the Interconnection Customer shall include events in the nature of failure to secure required permits and other governmental approvals to construct the Generating Facility at its full MW generating capacity, if the Interconnection Customer has made diligent efforts to do so. Upon such demonstration to the reasonable satisfaction of the CAISO (after consultation with the applicable Participating TO) the CAISO will permit such reduction.

No permitted reduction of MW generation capacity under this Article shall operate to diminish the Interconnection Customer's cost responsibility for Network Upgrades or to diminish the Interconnection Customer's right to repayment for financing of Network Upgrades under this LGIA.

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ARTICLE 11. PERFORMANCE OBLIGATION

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11.4.1 Repayment of Amounts Advanced for Network Upgrades.

Upon the Commercial Operation Date of a Generating Facility that is not a Phased Generating Facility, and the in-service date of the corresponding Network Upgrades, 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.

11.4.1.2 Repayment of Amounts Advanced Regarding Phased Generating Facilities

Upon the Commercial Operation Date of each phase of a Phased Generating Facility, the Interconnection Customer shall be entitled to a repayment equal to the Interconnection Customer's contribution to the cost of Network Upgrades for that completed phase for which the Interconnection Customer is responsible, as set forth in Appendix G, if all of the following conditions are satisfied:

- (a) The Generating Facility is capable of being constructed in phases;
- (b) The Generating Facility is specified in the LGIA as being constructed in phases;
- (c) The completed phase corresponds to one of the phases specified in the LGIA;
- (d) The phase has achieved Commercial Operation and the Interconnection Customer has tendered notice of the same pursuant to this LGIA;
- (e) All parties to the LGIA have confirmed that the completed phase meets the requirements set forth in this LGIA and any other operating, metering, and interconnection requirements to permit generation output of the entire capacity of the completed phase as specified in this LGIA;
- (f) The Network Upgrades necessary for the completed phase to meet the desired level of deliverability are in service; and
- (g) The Interconnection Customer has posted one hundred (100) percent of the Interconnection Financial Security required for the Network Upgrades for all the phases of the Generating Facility (or if less than one hundred (100) percent has been posted, then all required Financial Security Instruments to the date of commencement of repayment).

Upon satisfaction of these conditions (a) through (g), the Interconnection Customer shall be entitled to receive a partial repayment of its financed cost responsibility in an amount equal to the percentage of the Generating Facility declared to be in Commercial Operation multiplied by the cost of the Network Upgrades associated with the completed phase. The Interconnection Customer shall be entitled to repayment in this manner for each completed phase until the entire Generating Facility is completed.

A reduction in the electrical output (MW capacity) of the Generating Facility pursuant to LGIA Article 5.19.4 shall not diminish the Interconnection Customer's right to repayment pursuant to this LGIA Article 11.4.1. If the LGIA includes a partial termination provision

and the partial termination right has been exercised with regard to a phase that has not been built, then the Interconnection Customer's eligibility for repayment under this Article as to the remaining phases shall not be diminished. [If the Interconnection Customer completes one or more phases and then breaches the LGIA, the Participating TO and the CAISO shall be entitled to offset any losses or damages resulting from the breach against any repayments made for Network Upgrades related to the completed phases.]

Any repayment amount for completion of a phase 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 date by which the requirements of items (a) through (g) have been fulfilled; 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.

11.4.1.3 Interest Payments and Assignment Rights

Any phased or non-phased 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.

11.4.1.4 Failure to Achieve Commercial Operation

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.

. . .

ARTICLE 18. INDEMNITY, CONSEQUENTIAL DAMAGES AND INSURANCE

* * *

18.3 Insurance. As indicated below, the designated Party shall, at its own expense, maintain in force throughout the periods noted in 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 any insurance required to be carried by the CAISO, the State of California:

- 18.3.1 Employer's Liability and Workers' Compensation Insurance. The Participating TO and the Interconnection Customer shall maintain such coverage from the commencement of any Construction Activities providing statutory benefits for workers compensation coverage and coverage amounts of no less than One Million Dollars (\$1,000,000) for employer's liability in accordance with the laws and regulations of the state in which the Point of Interconnection is located. The Participating TO shall provide the Interconnection Customer with evidence of such insurance within thirty (30) days of any request by the Interconnection Customer. The Interconnection Customer shall provide evidence of such insurance thirty (30) days prior to entry by any employee or contractor or other person acting on the Interconnection Customer's behalf onto any construction site to perform any work related to the Interconnection Facilities or Generating Facility.
- 18.3.2 Commercial General Liability Insurance. The Participating TO and the Interconnection Customer shall maintain commercial general liability insurance commencing within thirty (30) days of the effective date of this LGIA, 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. If the activities of the Interconnection Customer are being conducted through the actions of an Affiliate, then the Interconnection Customer may satisfy the insurance requirements of this Section 18.3.2 by providing evidence of insurance coverage carried by such Affiliate and showing the Participating TO as an additional insured, together with the Interconnection Customer's written representation to the Participating TO and the CAISO that the insured Affiliate is conducting all of the necessary preconstruction work. Within thirty (30) days prior to the entry of any person on behalf of the Interconnection Customer onto any construction site to perform work related to the Interconnection Facilities or Generating Facility, the Interconnection Customer shall replace any evidence of Affiliate Insurance with evidence of such insurance carried by the Interconnection Customer, naming the Participating TO as additional insured.
- 18.3.3 Business Automobile Liability Insurance. Prior to the entry of any such vehicles on any construction site in connection with work done by or on behalf of the Interconnection Customer, the Interconnection Customer shall provide evidence of 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. Upon the request of the Participating TO, the Interconnection Customer shall name the Participating TO as an additional insured on any such policies.

- 18.3.4 Excess Public Liability Insurance. Commencing at the time of entry of any person on its behalf upon any construction site for the Network Upgrades, Interconnection Facilities, or Generating Facility, the Participating TO and the Interconnection Customer shall maintain 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. Such insurance carried by the Participating TO shall name the Interconnection Customer as an additional insured, and such insurance carried by the Interconnection Customer shall name the Participating TO as an additional insured.
- 18.3.5 The Commercial General Liability Insurance, Business Automobile Insurance and Excess Public Liability Insurance policies shall name the other Parties identified in the sections above, 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 of cancellation in coverage or condition. If any Party can reasonably demonstrate that coverage policies containing provisions for insurer waiver of subrogation rights, or advance written notice are not commercially available, then the Parties shall meet and confer and mutually determine to (i) establish replacement or equivalent terms in lieu of subrogation or notice or (ii) waive the requirements that coverage(s) include such subrogation provision or require advance written notice from such insurers.

* * *

18.3.10 Notwithstanding the foregoing, each Party may self-insure

- a) to meet the insurance requirements of Article 18.3.1, to the extent that it maintains a self-insurance program that is a qualified self insurer within the state in which the Point of Interconnection is located, under the laws and regulations of such state; and
- b) 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.

* * *

Attachment B – Marked Tariff Generator Interconnection Procedures Phase II Tariff Amendment California Independent System Operator Corporation Fifth Replacement FERC Electric Tariff November 30, 2011

* * *

24.4.6.5 LGIP Network Upgrades

Beginning with the 2011/2012 planning cycle, Network Upgrades originally identified during the Phase II Interconnection Study or Interconnection Facilities Study Process of the Large Generation Interconnection Process as set forth in Section 7 of Appendix Y that are not already included in a signed LGIA may be assessed as part of the comprehensive Transmission Plan if these Network Upgrades satisfy the following criteria:

- (a) The Network Upgrades consist of new transmission lines 200 kV or above, and have capital costs of \$100 million or greater;
- (b) The Network Upgrade is a new 500 kV substation that has capital costs of \$100 million or greater; or,
- (c) The Network Upgrades have a capital cost of \$200 million or more.

The CAISO will post a list of the Network Upgrades eligible for assessment in the Transmission Planning Process in accordance with the schedule set forth in the applicable Business Practice Manual. Network Upgrades included in the comprehensive Transmission Plan may include additional components not included in the Network Upgrades originally identified during the Phase II Interconnection Study or may be expansions of the Network Upgrades originally identified during the Phase II Interconnection Study if the CAISO determines during the Transmission Planning Process that such components or expansions are needed as additional elements under section 24.1. Network Upgrades identified in the LGIP Phase II studies but not assessed in the Transmission Planning Process will be included in Large Generator Interconnection Agreements, as appropriate. Network Upgrades assessed in the Transmission Planning Process but not modified or replaced will be included in Large Generator Interconnection Agreements, as appropriate. Construction and ownership of Network Upgrades specified in the comprehensive Transmission Plan under this section, including any needed additional components or expansions, will be the responsibility of the Participating TO if the Phase II studies identified the original upgrade as needed and such upgrade has not yet been set forth in an executed Large Generator Interconnection Agreement. To If, through the extent that additional components or expansions to Network Upgrades remain the

responsibility of the Participating TO and such Network Upgrades are subsequently abandoned, the

Participating TO shall be presumed to be eligible, subject to prudency and any other applicable review by FERC, to include in its TRR the costs of such Network Upgrades if the costs attributable to the abandonment of such Network Upgrades (as modified, replaced or otherwise reconfigured in the Transmission Planning Process) exceed the amounts funded by Interconnection Customers pursuant to Appendix Y. This presumption shall not apply in the case of Network Upgrades which the applicable Participating TO agreed to up-front fund independent of any obligation to fund pursuant to the Transmission Planning Process. If, through the comprehensive Transmission Planning Process, the CAISO identifies any additional components or expansions of Network Upgrades that result in the need for other upgrades or additions, the responsibility to build and own such additions or upgrades will be determined by this Section 24, according to the category of those other upgrades or additions. Any decision in the Transmission Planning Process to modify Network Upgrades identified in the Large Generator Interconnection Process will not increase the cost responsibility of the Interconnection Customer as described in Appendix Y, Section 7. Category 1 policy-driven elements identified under Section 24.4.6.7 could supplant the need for LGIP Network Upgrades that would be developed in subsequent Generator Interconnection Process cycles. To the extent that a Category 1 policy-driven element eliminates or downsizes the need for a Network Upgrade, the Interconnection Customer's cost responsibility for such Network Upgrade shall be eliminated or reduced. Any financial security posting shall be adjusted accordingly.

* * *

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 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; and-
- (e) each existing Generating Unit that is a Qualifying Facility and that is converting to a Participating Generator without repowering or reconfiguring the existing Generating Unit, subject to Section 25.1.2.

The CAISO shall be authorized to verify whether the requirements of Section 25.1(b), (c), (d), and (e) apply to each existing Generating Unit, and the owner of the existing Generating Unit, or its designee, shall be responsible for any costs related to that verification process pursuant to the Business Practice Manual. The CAISO may engage the services of the applicable Participating TO in the ISO's conducting such verification activities, in which case such costs shall be borne by the such party making the request under Section 25.1, and such costs shall be included in any CAISO invoice for verification activities.

* * *

37.9.4 _____ Disposition Of Proceeds

The CAISO shall collect penalties assessed pursuant to this Section 37.9 and deposit such amounts in an interest bearing trust account. After the end of each calendar year, the CAISO shall distribute the penalty amounts together with interest earned through payments to Scheduling Coordinators as provided herein. For the purpose of this Section 37.9.4, "eligible Market Participants" shall be those Market Participants that were not assessed a financial penalty pursuant to this Section 37 during the calendar year.

Each Scheduling Coordinator that paid GMC during the calendar year will identify, in a manner to be specified by the CAISO, the amount of GMC paid by each Market Participant for whom that Scheduling Coordinator provided service during that calendar year. The total amount assigned to all Market Participants served by that Scheduling Coordinator in such calendar year (including the Scheduling Coordinator itself for services provided on its own behalf), shall equal the total GMC paid by that Scheduling Coordinator.

The CAISO will calculate the payment due each Scheduling Coordinator based on the lesser of the GMC actually paid by all eligible Market Participants represented by that Scheduling Coordinator, or the product of a) the amount in the trust account, including interest, and b) the ratio of the GMC paid by each Scheduling Coordinator for eligible Market Participants, to the total of such amounts paid by all Scheduling Coordinators. Each Scheduling Coordinator is responsible for distributing payments to the eligible Market Participants it represented in proportion to GMC collected from each eligible Market Participant.

Prior to allocating the penalty proceeds, the CAISO will obtain FERC's approval of its determination of eligible Market Participants and their respective shares of the trust account proceeds. If the total amount in the trust account to be so allocated exceeds the total GMC obligation of all eligible Market Participants, then such excess shall be treated in accordance with Section 11.29.9.68.5.3.(b).

* * *

Appendix A

Master Definitions Supplement

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- Partial Deliverability Status

The condition whereby a Large Generating Facility interconnected with the CAISO Controlled Grid can deliver an elected amount of output that is less than the full output of the Large Generating Facility to the aggregate of Load on the CAISO Controlled Grid, consistent with the CAISO's Reliability Criteria and procedures and the CAISO On-Peak Deliverability Assessment.

* * *

Appendix T

Small Generator Interconnection Agreement

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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

5.3.1.1 Repayment of Amounts Advanced Regarding Non-Phased Generating Facilities

Upon the Commercial Operation Date of a Generating Facility that is not a Phased Generating Facility, 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-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 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.

5.3.1.2 Repayment of Amounts Advanced Regarding Phased Generating Facilities

Upon the Commercial Operation Date of each phase of a Phased Generating Facility, the Interconnection Customer shall be entitled to a repayment equal to the amount paid to the Participating TO for the cost of Network Upgrades for that completed phase for which the Interconnection Customer is responsible, if all of the following conditions are satisfied:

- (a) The Generating Facility is capable of being constructed in phases;
- (b) The Generating Facility is specified in the SGIA as being constructed in phases;
- (c) The completed phase corresponds to one of the phases specified in the SGIA;
- (d) The Interconnection Customer has tendered notice pursuant to the SGIA that the phase has achieved Commercial Operation;
- (e) All parties to the SGIA have agreed that the completed phase meets the requirements set forth in the SGIA and any other operating, metering, and interconnection requirements to permit generation output of the entire capacity of the completed phase as specified in the SGIA;
- (f) The Network Upgrades necessary for the completed phase to meet the desired level of deliverability are in service; and
- (g) The Interconnection Customer has posted one hundred (100) percent of the Interconnection Financial Security required for the Network Upgrades for all the phases of the Generating Facility.

Upon satisfaction of these conditions (a) through (g), the Interconnection

Customer shall be entitled to receive a partial repayment of its financed cost responsibility in an amount equal to the percentage of the Generating Facility declared to be in Commercial Operation multiplied by the cost of the Network

Upgrades associated with the completed phase. The Interconnection Customer shall be entitled to repayment in this manner for each completed phase until the entire Generating Facility is completed.

If the SGIA includes a partial termination provision and the partial termination right has been exercised with regard to a phase that has not been built, then the Interconnection Customer's eligibility for repayment under this Article as to the remaining phases shall not be diminished. If the Interconnection Customer completes one or more phases and then defaults on the SGIA, the Participating TO and the CAISO shall be entitled to offset any losses or damages resulting from the default against any repayments made for Network Upgrades related to the completed phases, provided that the party seeking to exercise the offset has complied with any requirements which may be required to apply the stream of payments utilized to make the repayment to the Interconnection Customer as an offset.

Any repayment amount for completion of a phase 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-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 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.

5.3.1.3 Interest Payments and Assignment Rights

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.

5.3.1.4 Failure to Achieve Commercial Operation

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.

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Attachment 1

Glossary Of Terms

* * *

Phased Generating Facility – A Generating Facility that is structured to be completed and to achieve Commercial Operation in two or more successive sequences that are specified in this SGIA, such that each sequence comprises a portion of the total megawatt generation capacity of the entire Generating Facility.

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Attachment 7

INTERCONNECTION REQUIREMENTS FOR <u>AN ASYNCHRONOUS</u> GENERATING FACILITYPLANT

Attachment 7 sets forth requirements and provisions specific to <u>all Asynchronous Generating Facilities.a</u> wind generating plant. All other requirements of this Agreement continue to apply to <u>Asynchronous Generating Facilitywind generating plant</u> interconnections.

A. Technical Standards Applicable to <u>Asynchronousa Wind</u> Generating <u>Facilities</u> Plant <u>Asynchronous Generating Facilities</u>

i. Low Voltage Ride-Through (LVRT) Capability

<u>An Asynchronous Generating Facility</u> 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 <u>requirements</u> <u>below</u> the <u>LVRT standard provides for a transition period standard and a post-transition period standard.</u>

- 1. An Asynchronous Generating Facility shall remain online for the voltage disturbance caused by any fault on the transmission grid, or within the Asynchronous Generating Facility between the Point of Interconnection and the high voltage terminals of the Asynchronous Generating Facility's step up transformer, having a duration equal to the lesser of the normal three-phase fault clearing time (4-9 cycles) or one-hundred fifty (150) milliseconds, plus any subsequent post-fault voltage recovery to the final steady-state post-fault voltage. Clearing time shall be based on the maximum normal clearing time associated with any three-phase fault location that reduces the voltage at the Asynchronous Generating Facility's Point of Interconnection to 0.2 per-unit of nominal voltage or less, independent of any fault current contribution from the Asynchronous Generating Facility.
- 2. An Asynchronous Generating Facility shall remain online for any voltage disturbance caused by a single-phase fault on the transmission grid, or within the Asynchronous Generating Facility between the Point of Interconnection and the high voltage terminals of the Asynchronous Generating Facility's step up transformer, with delayed clearing, plus any subsequent post-fault voltage recovery to the final steady-state post-fault voltage. Clearing time shall be based on the maximum backup clearing time associated with a single point of failure (protection or breaker failure) for any single-phase fault location that reduces any phase-to-ground or phase-to-phase voltage at the Asynchronous Generating Facility's Point of Interconnection to 0.2 per-unit of nominal voltage or less, independent of any fault current contribution from the Asynchronous Generating Facility.

- 3. Remaining on-line shall be defined as continuous connection between the Point of Interconnection and the Asynchronous Generating Facility's units, without any mechanical isolation. Asynchronous Generating Facilities may cease to inject current into the transmission grid during a fault.
- 4. The Asynchronous Generating Facility is not required to remain on line during multi-phased faults exceeding the duration described in Section A.i.1 of this Appendix H or single-phase faults exceeding the duration described in Section A.i.2 of this Appendix H.
- 2.5. The requirements of this Section A.i. of this Appendix H do not apply to faults that occur between the Asynchronous Generating Facility's terminals and the high side of the step-up transformer to the high-voltage transmission system.
- (i)6. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
- (ii)7. Asynchronous Generating Facilities Wind generating plants may meet the LVRT requirements of this Section A.i of this Appendix H through standard by the performance of the generating units generators or by installing additional equipment (e.g., Static VAr Compensator) within the Asynchronous Generating Facility, wind generating plant or by a combination of generating unitgenerator performance and additional equipment.
- 8. The provisions of this Section A.i of this Appendix H apply only if the voltage at the Point of Interconnection has remained within the range of 0.9 and 1.10 per-unit of nominal voltage for the preceding two seconds, excluding any sub-cycle transient deviations.

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.

- 3. 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.
- 4. 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.
- 5. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
- 6. 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.
- 7. 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:

- (iii) 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.
- (iv) This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.
- (v) 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. Frequency Disturbance Ride-Through Capacity

An Asynchronous Generating Facility shall comply with the off nominal frequency requirements set forth in the WECC Under Frequency Load Shedding Relay Application Guide or successor requirements as they may be amended from time to time.

<u>iii.</u> Power Factor Design and Operating Requirements Criteria (Reactive Power)

An Asynchronous Generating FacilityA 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 SLGIAAgreement in order to maintain a specified voltage schedule, if the Phase II Interconnection Studysystem 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 Asynchronous Generating Facilitywind plant is in operation. Asynchronous Generating Facilities 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 Studysystem impact study shows this to be required for system safety or reliability.

iii. iv. Supervisory Control and Data Acquisition (SCADA) Capability

An Asynchronous Generating FacilityThe 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 Asynchronous Generating Facilitywind plant Interconnection Customer shall determine what SCADA information is essential for the proposed Asynchronous Generating Facilitywind

plant, taking into account the size of the plant and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability. <u>in its area.</u>

v. Power System Stabilizers (PSS)

Power system stabilizers are not required for Asynchronous Generating Facilities.

Appendix Y

For Interconnection Requests

Generator Interconnection Procedures (GIP)

* * *

Generator

Interconnection Procedures (GIP)

Table of Contents

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6 GENERATOR INTERCONNENECTION STUDY PROCESS AGREEMENT

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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

"Phased Generating Facility" shall mean a Generating Facility that is structured to be completed and to achieve Commercial Operation in two or more successive sequences that are specified in a GIA, such that each sequence comprises a portion of the total megawatt generation capacity of the entire Generating Facility.

* * *

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, the elected output of a

Generating Facility seeking Partial 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.

All cost estimates for Interconnection Facilities and Network Upgrades contained in Interconnection Studies will be set forth in the Interconnection Study report in present dollar costs as well as time-adjusted dollar costs, adjusted to the estimated year of construction of the components being constructed.

* * *

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, or are in the CAISO's ISO's third Queue Cluster, 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, or are in the CAISO's HSO's third Queue Cluster, 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.

3.6 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 (such posted information to be placed on the secure CAISO Website to protect any Critical Energy Infrastructure Information contained therein). The CAISO shall post to the secure CAISO Website any documents or other materials posted pursuant to this GIP or a Business Practice Manual that contain Critical Energy Infrastructure Information.

* * *

4.2.1 Flow Impact Test

An Interconnection Request shall have satisfied the requirements of this Section if it satisfies, alternatively, either the set of requirements set forth in GIP Section 4.2.1.1 or the set of requirements set forth in GIP Section 4.2.1.2.

4.2.1.1 Requirement Set Number One General Independent Study Requests:

<u>The CAISO</u>, in coordination with the applicable Participating TO(s), will perform the flow impact test for <u>an each</u>-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.

4.2.1.2 Requirement Set Number Two: for Requests for Independent Study of Behind-the-Meter Expansion for Solar and Wind Technologies

This GIP Section 4.2.1.2 applies to an Interconnection Request relating to a behind-themeter expansion where the existing Generating Facility prime mover is wind technology or solar technology. Such an Interconnection Request submitted under the Independent Study Process will satisfy the requirements of GIP Section 4.2.1 if it satisfies all of the following technical and business criteria for behind-the-meter capacity expansion of a Generating Facility:

(i) Technical criteria.

- The total nameplate capacity of the existing Generating Facility plus the incremental increase in capacity does not exceed in the aggregate one hundred twenty-five (125) percent of its previously studied capacity and does not exceed, in the aggregate, one hundred (100) MW.
- The behind-the-meter capacity expansion shall not take place until after the original Generating Facility has achieved Commercial Operation and all Network Upgrades for the original Generating Facility have been placed in service.
- The expanded capacity for the Generating Facility has been placed under a separate breaker (the expansion breaker) such that the expansion can be metered separately at all times.
- Unless specifically requested by the CAISO, the total output of the Generating Facility does not exceed its originally studied capacity at any time. The CAISO will have the authority to trip the expansion breaker if the total output of the Generating Facility exceeds the originally studied capacity.
- The processing of an Interconnection Request for behind-the-meter expansion under the Independent Study Process shall not result in any increase in the rated Generating Facility electrical output (MW capacity) beyond the rating which pre-existed the Interconnection Request. Further, the processed Interconnection Request shall not operate as a basis under the CAISO Tariff to increase the Net Qualifying Capacity of the Generating Facility beyond the rating which pre-existed the Interconnection Request.

(ii) Business criteria.

- The Deliverability Status (Full Capacity, Partial Deliverability or Energy-Only) of the capacity expansion is the same as the Deliverability Status specified for the formally studied Generating Facility.
- The GIA is amended to reflect the revised operational features of the Generating Facility capacity expansion.
- The Interconnection Customer may at any time request that the CAISO convert the Interconnection Request for behind-the-meter expansion to an Independent Study Process Interconnection Request to evaluate an incremental increase in electrical output (MW generating capacity) for the existing Generating Facility. The Interconnection Customer must accompany such a conversion request with an appropriate Interconnection Study Deposit and agree to comply with other sections of GIP Section 4 applicable to an Independent Study Process Interconnection Request.

4.6 Deliverability Assessment

Interconnection Customers under the Independent Study Process that requests Partial orrequest 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 (or increase in capacity of an existing 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 (or increase in capacity) will be treated as an Energy-Only Deliverability Status Generating Facility until such Delivery Network Upgrades are in service.

* * *

5.1 Applicability and Initiation of Fast Track Process Request

Applicability to a proposed Generating Facility. 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 is requesting Energy-Only Deliverability Status 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.

Applicability to an existing Generating Facility. If the Interconnection of an existing Generating Facility meets the qualifications for Interconnection under CAISO Tariff Section 25.1(d) or (e) but, at the same time, the Interconnection Customer also seeks to repower or reconfigure the existing Generating Facility in a manner that increases the gross generating capacity by not more than 5 MW, then the Interconnection Customer may request that the Fast Track Process be applied with respect to the repowering or reconfiguration of the existing Generating Facility that results in the incremental increase in MW.

<u>Initiating the Fast Track Interconnection Request.</u> 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.

* * *

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 Deliverability Assessment and Off-Peak Deliverability Assessment (which will be for informational purposes only beginning with the Phase II Interconnection Study for Queue Clusters 3 and 4(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).

* * *

6.5.2 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 or Partial 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 or Partial 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 or Partial 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 or Partial Deliverability Status to meet the requirements for deliverability. Deliverability requires that the Generating Facility Capacity, or the portion of Generating Facility Capacity designated for Partial Deliverability, 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 or Partial 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 or Partial 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 identify transmission upgrades in addition to those 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. The transmission upgrades Delivery Network Upgrades will be identified under this Section shall comprise those needed forto-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, to beis 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.

Beginning with-At the Phase II Interconnection Study for Queue Clusters 3 and 4, the ISO will perform the CAISO's discretion, an additional Off-Peak Deliverability Assessment performed 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 thisGIP Section 6.59.2.2 for or change the Interconnection Customer informational Request's Full Capacity Deliverability Status for purposes only, and any of financing under GIP Section 12.3.1. The cost of all-Delivery Network Upgrades identified in the assessment will be referred to Off-Peak Deliverability Assessment as "off peak deliverability transmission upgrades," the description of such upgrades in any report will be conceptual in nature, and such transmission upgrades will not be included in a plan of service within the applicable Interconnection Study report.

The cost of all transmission upgrades identified in the Off-Peak Deliverability Assessment performed during the course of the part of Phase I Interconnection Study shall be estimated in accordance with GIP Section 6.6. However, because these transmission upgrades The estimated costs of Delivery Network Upgrades identified in the Off-Peak Deliverability Assessment shall be conceptual in nature only (as of the Phase II Interconnection Study for Clusters 3 and 4), then, beginning with that study, the transmission upgrades identified in this Section 6.5.2.2 shall be treated as follows:

- (i) these transmission upgrades will not be required for the proposed Generating

 Facility (or proposed increase in capacity) that is the subject to the assigned to each-Interconnection Request to achieve Full Capacity Deliverability Status; 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.
- (ii) the estimated costs for these transmission upgrades shall not be assigned to any
 Interconnection Customer in an Interconnection Study report, such costs shall
 not be considered in determining the cost responsibility or maximum cost
 responsibility of the Interconnection Customer for Network Upgrades under this
 GIP or in determining the Interconnection Financial Security than an
 Interconnection Customer must post under Section 9;
- (i)(iii) and the applicable Participating TO(s) shall not be responsible under this GIP for financing or constructing such transmission upgrades.

Until such time as the Phase II Interconnection Study report is issued to the Interconnection Customer, the 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, as well as. In contrast, the maximum valuecosts assigned to Interconnection Customers for each Interconnection Customer's total cost responsibility for Network Upgrades. As set forth in Section 9.5 of this GIP, after issuance of the Phase II Participating TO's Interconnection Study, Facilities under this Section 6 of the GIP are estimates only that establish the Interconnection Customer'sbasis for the initial Interconnection Financial Security obligations and maximum cost responsibility for Network Upgrades will be based on the lesser of the cost estimates set forth in the Phase I and Phase II Interconnection Studies. 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 issuepublish 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 <u>issuingproviding</u> 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.

Should the Interconnection Customer provide written comments on the final Phase I Interconnection Study report within ten (10) Business Days of receipt of the report, but in no event less than three (3) Business Days before the Results Meeting conducted to discuss the report, whichever is sooner, the ISO will address the written comments in the Phase I Interconnection Study Results Meeting. Should the Interconnection Customer provide comments at any later time (up to the time of the Results Meeting), then such comments shall be considered informal inquiries to which the CAISO will provide informal, informational responses at the Results Meeting, to the extent possible.

The Interconnection Customer may submit, in writing, additional comments on the final Phase I Interconnection Study report up to (3) Business Days following the Results Meeting. Based on any discussion at the Results Meeting and any comments received, the CAISO (in consultation with the applicable Participating TO(s)) will determine, in accordance with Section 6.10 of this GIP, whether it is necessary to follow the final Phase I Interconnection Study report with a revised study report or an addendum. I The CAISO will issue any such revised report or addendum to the Interconnection Customer no later than fifteen (15) Business Days following the Results Meeting.

* * *

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 <u>issuancepublication</u> 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.

6.9.3 Confirmation of Deliverability Status

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 the 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
Interconnection Study) or (ii) change the status of desired deliverability as follows:

- (a) from Full Capacity Deliverability Status to Energy-Only Deliverability Status;
- (b) from Full Capacity Deliverability Status to Partial Deliverability Status with a specified Partial Deliverability level in MW;
- (c) from Partial Deliverability Status to Energy-Only Deliverability Status; or
- (d) reduce the level of Partial Deliverability Status in MW.

6.9.4 Determination of Impact of Modifications Decreasing Generating Capacity Output or Deliverability Status Reductions on Calculation of Initial Financial Security Posting

After receiving from the Interconnection Customer any modification elections involving decreases in electrical output (MW) of the Generating Facility and/or changes (*i.e.*, reductions) in deliverability status as permitted in Section 6.9.3 above, the CAISO, in coordination with the applicable Participating TO(s), will determine, based on best engineering judgment, whether such modifications will eliminate the need for any Delivery Network Upgrades identified in the Phase I Interconnection Study report. The CAISO

and applicable Participating TO(s) will not conduct any re-studies in making this determination.

If the CAISO and applicable Participating TO(s) should determine that one or more Delivery Network Upgrades identified in the Phase I Interconnection Study are no longer needed, then, solely for purposes of calculating the amount of the Interconnection Customer's initial Financial Security Posting under Section 9.2, such Delivery Network Upgrade(s) will be considered to be removed from the plan of service described in the Interconnection Customer's Phase I Interconnection Study report and the cost estimates for such upgrades shall not be included in the calculation of Interconnection Financial Security in Section 9.2. The CAISO will inform in a timely manner any Interconnection Customers so affected, and provide the Interconnection Customers with written notice of the revised initial Interconnection Financial Security posting amounts. No determination under this Section 6.9.4 shall affect either (i) the timing for the initial Interconnection Financial Security posting or (ii) the maximum value for the Interconnection Customer's total cost responsibility for Network Upgrades established by the Phase I Interconnection Study report.

6.10 Revisions and Addenda to Final Interconnection Study Reports

6.10.1 Substantial Error or Omissions; Revised Study Report

Should the CAISO discover, through written comments submitted by an Interconnection Customer or otherwise, that a final Phase I or Phase II Interconnection Study Report (which can mean a final Phase I or Phase II Interconnection Study Report for cluster studies or a final System Impact or Facilities report for the Independent Study Process) contains a substantial error or omission, the CAISO will cause a revised final report to be issued to the Interconnection Customer. A substantial error or omission shall mean an error or omission that results in one or more of the following:

- (i) understatement of the Interconnection Customer's cost responsibility for either Network Upgrades or Participating TO Interconnection Facilities by more than five (5) percent or one million dollars (\$1,000,000), whichever is greater; or
- (ii) overstatement of the Interconnection Customer's cost responsibility for either

 Network Upgrades or Participating TO Interconnection Facilities of more than twenty (20) percent; or
- (iii) results in a delay to the schedule by which the Interconnection Customer can achieve Commercial Operation, based on the results of the final Interconnection Study, by more than one year.

A dispute over the plan of service by an Interconnection Customer shall not be considered a substantial error or omission unless the Interconnection Customer demonstrates that the plan of service was based on an invalid or erroneous study assumption that meets the criteria set forth above.

6.10.2 Other Errors or Omissions; Addendum

If an error or omission in an Interconnection Study report (for either the cluster process or Independent Study Process) is not a substantial error or omission, the CAISO shall not issue a revised final Interconnection Study report, although the error or omission may result in an adjustment of the corresponding Interconnection Financial Security. Rather, the CAISO shall document such error or omission and make any appropriate correction by issuing an addendum to the final report.

The CAISO and applicable Participating TO shall also incorporate, as needed, any corrected information pertinent to the terms or conditions of the GIA in the draft GIA provided to an Interconnection Customer pursuant to Section 11 of this GIP.

6.10.3 Only Substantial Errors or Omissions Adjust Posting Dates

Unless the error or omission is a substantial error resulting in the issuance of a revised final Interconnection Study report, the correction of an error or omission shall not operate to delay any deadline for posting Interconnection Financial Security set forth in Section 9 of this GIP. In the case of a substantial error or omission resulting in the issuance of a revised final Phase I or Phase II Interconnection Study report, the deadline for posting Interconnection Financial Security shall be extended as set forth in GIP Section 9. In addition to issuing a revised final report, the CAISO will promptly notify the Interconnection Customer of any revised posting amount and extended due date occasioned by a substantial error or omission.

An Interconnection Customer's dispute of a CAISO determination that an error or omission in a final Study report does not constitute substantial error shall not operate to change the amount of Interconnection Financial Security that the Interconnection Customer must post or to postpone the applicable deadline for the Interconnection Customer to post Interconnection Financial Security. In case of such a dispute, the Interconnection Customer shall post the amount of Interconnection Financial Security in accordance with Section 9 of this GIP, subject to refund in the event that the Interconnection Customer prevails in the dispute.

* * *

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. Beginning with Queue Cluster 5, the Phase II Interconnection Study will incorporate eligible Interconnection Requests from the previous Phase I Interconnection Study. 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.

The CAISO will perform an operational partial and interim Deliverability Assessment (operational Deliverability Assessment) as part of the Phase II Interconnection Study. The operational Deliverability Assessment will be performed for each applicable queue cluster study group for each applicable study year through the prior year before all of the required Delivery Network Upgrades are in-service. The CAISO will consider operational Deliverability Assessment results stated for the first year in the pertinent annual Net Qualifying Capacity process that the CAISO performs for the next Resource Adequacy Compliance Year. The study results for any other years studied in operational Deliverability Assessment will be advisory and provided to the Interconnection Customer for its use only and for informational purposes only.

The CAISO will publish the methodology under which the CAISO will perform the operational deliverability assessment on the ISO Website or within a Business Practice Manual.

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 or Partial 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.

Beginning with the Phase II Interconnection Study for Clusters 3 and 4, any transmission upgrades identified in the Off-Peak Deliverability Assessment as part of the Phase II Interconnection Study, and the estimated costs thereof, shall be conceptual in nature only, and therefore, commencing with that study, the estimated costs of transmission upgrades identified in the Off-Peak Deliverability Assessment shall not be assigned to any Interconnection Customers in an Interconnection Study report, such costs shall not be considered in determining the cost responsibility or maximum cost responsibility of the Interconnection Customer for Network Upgrades under this GIP, and the applicable Participating TO(s) shall not be responsible under this GIP for financing or constructing such transmission upgrades.

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 issuepublish 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.

7.7 Results Meeting With The CAISO And Applicable Participating PTO(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.

Should the Interconnection Customer provide written comments on the final Phase II Interconnection Study report within ten (10) Business Days of receipt of the report, but in no case less than three (3) Business Days before the Results Meeting, whichever is

sooner, then the ISO will address the written comments in the Phase II Interconnection
Study Results Meeting. Should the Interconnection Customer provide comments at any
later time (up to the time of the Results Meeting), then such comments shall be
considered informal inquiries to which the CAISO will provide informal, informational
responses at the Results Meeting, to the extent possible.

The Interconnection Customer may submit, in writing, additional comments on the final Phase II Interconnection Study report up to three (3) Business Days following the Results Meeting. Based on any discussion at the Results Meeting and any comments received, the CAISO (in consultation with the applicable Participating TO(s)) will determine, in accordance with Section 6.10 of this GIP, whether it is necessary to follow the final Phase II Interconnection Study Report with a revised study report or an addendum to the report. The CAISO will issue any such revised report or addendum no later than fifteen (15) Business Days following the Results Meeting.

8.3 PTO Tariff Option for Full Capacity Deliverability Status

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 CAISO 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.

8.4 Deliverability from Non-Participating TOs

This process applies to Generating Facilities that interconnect to the transmission facilities of a Non-Participating TO located within the CAISO Balancing Authority Area that wish to obtain Full Capacity Deliverability Status under the CAISO Tariff. Such Generating Facilities will be eligible to be studied by the CAISO for Full Capacity Deliverability Status pursuant to the following provisions:

- (a) The Generating Facility seeking Full Capacity Deliverability Status under the CAISO Tariff must submit a request to the CAISO to study it for such Status. Such study request will be in the form of the CAISO's pro forma Interconnection Request, must include the Generating Facility's intended Point of Delivery to the CAISO Controlled Grid, and must be submitted during a Cluster Application Window. The Generating Facility will be required to satisfy the same study deposit and Interconnection Financial Security posting requirements as an Interconnection Customer, but will not be considered an Interconnection Customer under the CAISO Tariff.
- (b) The Non-Participating TO that serves as the interconnection provider to the Generating Facility must treat the CAISO as an Affected System in the interconnection study process for the Generating Facility.
- (c) As part of the Non-Participating TO's interconnection study process, the CAISO, in its sole discretion and on a case-by-case basis, will determine the adequacy of transmission on the Non-Participating TO's system for the Generating Facility to be deemed fully deliverable to the elected Point of Delivery to the CAISO Controlled Grid. Only those proposed Generating Facilities (or proposed increases in Generating Facility capacity) for which the CAISO has determined there is adequate transmission capacity on the Non-Participating TO system to

- provide full deliverability to the applicable Point of Delivery will be eligible to be assessed for Full Capacity Deliverability Status under the CAISO Tariff.
- (d) If the Generating Facility is eligible for study for Full Capacity Deliverability
 Status, the CAISO will include the Generating Facility in the Interconnection
 Study process for the Queue Cluster associated with the Cluster Application
 Window in which the Generating Facility has submitted its study request. The
 Point of Delivery with the CAISO will be treated as the Point of Interconnection
 for purposes of including the Generating Facility in a Group Study with any
 applicable CAISO Interconnection Customers in the relevant Queue Cluster.
 Pursuant to the Queue Cluster Interconnection Study process, as set forth in this
 GIP, the Generating Facility will be allocated its share of any applicable Delivery
 Network Upgrades.
- (e) The CAISO, Participating TO, and Interconnection Customer will execute any necessary agreements for reimbursement of study costs incurred it to assure cost attribution for any Network Upgrades relating to any deliverability status conferred to each such interconnection customer under the Non-Participating TO's tariff.
- (f) The Non-Participating TO's interconnection customer will receive repayment of funds posted for the construction of the Delivery Network Upgrades on the CAISO Controlled Grid in the same manner as CAISO Interconnection Customers, as specified in GIP Section 12.3.2.

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 <u>issuancepublication</u> 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.

Revised Cluster Study Reports. If the CAISO revises a final Phase I Interconnection Study report pursuant to GIP Section 6.10, the initial postings set forth in this GIP Section 9.2 will be due from the Interconnection Customer by the later of ninety (90) calendar days after issuance of the original final Phase I Interconnection Study Report or forty (40) calendar days after issuance of the revised final Phase I Interconnection Study Report.

Revised Independent Study Track Reports. If the CAISO revises a final System Impact Study report pursuant to GIP Section 6.10, the initial postings set forth in this GIP Section 9.2 will be due from the Interconnection Customer by the later of ninety (90) calendar days after issuance of the original final System Impact report or thirty (30) calendar days after issuance of the revised System Impact Study report.

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9.2.4 Posting Amount for Participating TO's Interconnection Facilities.

- 9.2.4.1 For Small Generating Facilities. Each The 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 also-post an Interconnection Financial Security instrument in an the-amount equal to the lesser of fifteen (15) 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 Participating TO's Interconnection Facilities 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. the Participating TO's Interconnection Facilities.
- 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 (15) percent of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Participating TO's Interconnection Facilities, (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.
- 9.2.4.3 Cost Estimates Less than Minimum Posting Amounts. If the costs of the estimated
 Participating TO Interconnection Facilities for either a Small Generating Facility or Large
 Generating Facility are less than the minimum posting amounts that would apply under
 Sections 9.2.4.1 or 9.2.4.2, then the posting amount required will be equal to the
 estimated Participating TO Interconnection Facilities amount.
- 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.
- 9.2.6 Effect of Decrease in Output on Initial Posting Requirement. If an Interconnection Customer decreases the electrical output of its facility after the completion of the Phase I Interconnection Study, pursuant to Section 6.9.2, and the <u>CAISOISO</u>, in consultation with the applicable Participating TO(s), is able to reasonably determine, prior to the date for initial posting of Interconnection Financial Security, that as a result of such decrease (solely or in combination with other modifications made by Interconnection Customers in the same Study Group) some of the Network Upgrades and/or Participating TO Interconnection Facilities identified in the Phase I Interconnection Study will no longer be required, then the calculation of the initial posting of Interconnection Financial Security will not include those Network Upgrades and/or Participating TO Interconnection Facilities. Such determination will be made based on the <u>CAISO'sISO's</u> best engineering judgment and will not include any re-studies.
- 9.3 Additional Posting Of Interconnection Financial Security9.3.1 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, except to the extent that the provisions of GIP Section 9.3.3 apply; (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 <u>issuancepublication</u> 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. <u>However, if the CAISO revises a final Phase II Interconnection Study report pursuant to GIP Section 6.10, the postings set forth in this GIP Section 9.3.1.2 will be due from the Interconnection Customer by the later of one hundred-eighty (180) calendar days after issuance of the original final Phase II Interconnection Study report or sixty (60) calendar days after issuance of the revised final Phase II Interconnection Study report. If the CAISO revises the final Facilities Study report pursuant to GIP Section 6.1, the postings set forth in this Section 9.2 will be due by the later of one hundred-twenty (120) calendar days after the issuance of the original final Facilities Study report or thirty (30) calendar days from the issuance of the revised Facilities Study report Process.</u>

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) percent%) 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, except to the extent that the provisions of GIP Section 9.3.3 apply.- 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) percent%) 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, except to the extent that the provisions of GIP Section 9.3.3 apply.- 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.

Each The 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-alse post an Interconnection Financial Security instrument such that the total Interconnection Financial Security posted by the Interconnection Customer for Participating TO Interconnection Facilities equals the lesser of (i) \$1 million or (ii) thirty (30) percent (30%) of the total cost responsibility assigned to

the Interconnection Customer <u>for Network Upgrades in eitherin</u> the final Phase <u>I</u> <u>Interconnection Study, final Phase</u> <u>II Interconnection Study, System Impact Study, or <u>for Participating TO's Interconnection</u> Facilities <u>Study, whichever is lower. In no event shall the total amount posted be less than \$100,000. <u>-</u></u></u>

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 Participating TO Interconnection Facilities equals the lesser of (i) \$15 million or (ii) thirty (30) percent 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 Participating TO Interconnection Facilities are less than the minimum posting amounts set forth above, the posting amount required will be equal to the estimated Participating TO Interconnection Facilities amount.

- 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 issuancepublication 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 issuancepublication 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 LGIA Article 2.3 or SGIA Article 3.3, whichever is applicable.

-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 (100) 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, except to the extent that the provisions of GIP Section 9.3.3 apply.- 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 (100) 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.

If an Interconnection Customer's Network Upgrades and/or Interconnection Facilities are separated into two or more specific components and/or can be separated into two or more separate and discrete phases of construction and the Participating TO is able to identify and separate the costs of the identified discrete components and/or phases of construction, then the Participating TO, the CAISO, and the Interconnection Customer may negotiate, as part of the Generator Interconnection Agreement, a division of the third Interconnection Financial Security posting into discrete Interconnection Financial Security amounts and may establish discrete milestone dates (however, outside dates must be included) for posting the amounts corresponding to each component and/or phase of construction related to the Network Upgrades and/or Interconnection Facilities described in the Generator Interconnection Agreement.

-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 LGIA Article 2.3 or SGIA Article 3.3, whichever is applicable.

9.3.3 Offsets for Network Upgrades Which Participating TOs Elect to Up- Front Fund.

To the extent that the Participating TO unequivocally commits (subject to conditions set forth or to be set forth in a GIA)to up-front fund Network Upgrades for which an Interconnection Customer has been assigned cost responsibility, the Interconnection Customer will be relieved of the obligation to make the second and third postings of Interconnection Financial Security for such Network Upgrades. The Interconnection Customer will remain obligated to make the second and third postings of Interconnection Financial Security for that portion of its assigned Network Upgrades that the Participating TO does not unequivocally (subject to conditions set forth or to be set forth in a GIA) commit to up-front fund.

As a prerequisite for the Participating TO up-front funding commitment to relieve the Interconnection Customer of its posting requirements for the related Network Upgrades, the up-front funding commitment must be conditional upon the Interconnection Customer's meeting milestones for Interconnection Customer development and construction of the Generating Facility as set forth in Appendix B to the LGIA or Attachment 4 to the SGIA, as applicable. Such Interconnection Customer milestones will include, with respect to the proposed Generating Facility or an identified phase of such facility as identified in the LGIA, such events as the securing of Site Exclusivity, posting of Financial Security under GIP Section 9 for the Interconnection Customer's cost responsibility for Network Upgrades (exclusive of up-front funded amounts) and for the Participating TO's Interconnection Facilities, securing of necessary permits, licenses, and/or property rights required for the construction, selection of applicable engineering, procurement and construction contractors, securing of necessary financing, and such other commercially reasonable milestones as the Participating TO, CAISO, and Interconnection Customer shall consent and agree to (such consent shall not be unreasonably withheld).

If the Participating TO withdraws its contractual commitment to up-front fund the Network Upgrades the Interconnection Customer will be required to post Interconnection Financial Security covering the Network Upgrades for which the Participating TO is withdrawing its up-front funding, within thirty (30) days of the Participating TO's notice to the Interconnection Customer that the up-front funding is being withdrawn.

If the Interconnection Customer's obligation to make the second posting of Interconnection Financial Security arises before the Generator Interconnection Agreement is executed by all parties to that agreement, the Interconnection Customer will be provided an additional thirty (30) days to post any Interconnection Financial Security related to Participating TO up-front funded Network Upgrades. The Interconnection Customer will continue to engage in good faith efforts to complete the negotiation of the Generator Interconnection Agreement during the additional thirty (30) day period. If the Generator Interconnection Agreement is not executed by all parties to that agreement within the additional thirty (30) day period, the Interconnection Customer will then be required to post the remaining Interconnection Financial Security, subject to refund.

If, after execution of the Generator Interconnection Agreement by all parties to that agreement, the Participating TO has made an up-front Network Upgrade funding commitment that is conditioned on a request for abandoned plant approval pending before FERC, the obligation to post the Interconnection Financial Security for Network Upgrades related to the Participating TO up-front funding commitment will be suspended during the pendency of the request before FERC. If FERC issues an order denying the request for abandoned plant approval, the obligation to post the Interconnection Financial Security for Network Upgrades will immediately be reinstated, and the Interconnection Customer will be required to post the Interconnection Financial Security within forty-five (45) days of the issuance of the FERC order unless the parties to the Generator Interconnection Agreement renegotiate that agreement within the forty-five (45) day period to provide for alternative timeframes or methods for funding the posting. Such a renegotiated Generator Interconnection Agreement will be deemed to be conforming to a FERC-accepted standard form of Generator Interconnection Agreement only if it extends the time period for posting the Interconnection Financial Security to a date no later than seventy-five (75) days after the FERC order denying abandoned plant approval was issued or provides for continued Participating TO up-front funding of the Network Upgrades. If the parties to the Generator Interconnection Agreement are unable to renegotiate and execute the Generator Interconnection Agreement within the forty-five (45) day period, the Interconnection Customer must post the Interconnection Financial Security before the close of such time period.

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.

* * *

- 9.4.2 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 (50) 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.

9.5 Maximum Cost Responsibility For Interconnection Customers

For Interconnection Customers in a Queue Cluster, after the CAISO issues the Phase II Interconnection Study report to the Interconnection Customer, the maximum value for the Financial Security required of each Interconnection Customer and the maximum cost responsibility of each Interconnection Customer for Network Upgrades shall be established by the lesser of the costs for Network Upgrades assigned to the Interconnection Customer in the final Phase I Interconnection Study report or the final Phase II Interconnection Study report.

For Interconnection Customers in the Independent Study Process, the maximum value for the Interconnection Customer's Financial Security and the maximum cost responsibility for Network Upgrades shall be established by the lesser of the costs for Network Upgrades assigned to the Interconnection Customer in the final System Impact Study report or final Facilities Study report.

Section 11 Generator Interconnection Agreement (GIA)

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 one hundred-twenty (120ninety (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 one hundred-twenty (120ninety (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 one hundred-twenty (120ninety (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.

* * *

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.

To the extent that this Section operates to impose upon the applicable Participating TO(s) cost responsibility for financing or construct Network Upgrades (which cost responsibility was previously assigned to Interconnection Customer(s) under GIP Section 7.3 and 7.4) in excess of what is covered by the Interconnection Financial Security posted by such Interconnection Customers, the Participating TO(s) shall be presumed to be eligible, subject to prudency and any other applicable review by FERC, to include such costs in its TRR(s).

* * *

12.3 Network Upgrades12.3.1 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 LGIA Article 12.1 or SGIA Article 6.1, whichever is applicable, 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 LGIA Article 12.1 or SGIA Article

- 6.1, whichever is applicable, 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 LGIA Article 12.1 or SGIA Article 6.1, whichever is applicable, 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.

To the extent that this Section operates to impose upon the applicable Participating TO(s) cost responsibility for financing and constructing Network Upgrades (which were previously assigned to Interconnection Customer(s) under GIP Section 7.3 and/or 7.4), in excess of the what is covered by the Interconnection Financial Security posted by such Interconnection Customer(s)), the Participating TO(s) shall be presumed to be eligible, subject to prudency review and any other applicable review by FERC, to include such costs in its TRR(s).

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

12.3.2.1 Repayment of Amounts Advanced Regarding Non-Phased Generating Facilities

Upon the Commercial Operation Date of <a href="https://example.com/attenum-nate-of-attenum-nat

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 in accordance with the GIA.

12.3.2.2 Repayment of Amounts Advanced Regarding Phased Generating Facilities

Upon the Commercial Operation Date of each phase of a Phased Generating Facility, the Interconnection Customer shall be entitled to a repayment for the Interconnection Customer's contribution to the cost of Network Upgrades for that completed phase in accordance with the Interconnection Customer's cost responsibility assigned for the phase under GIP Sections 7.3 and 7.4 if all of the following conditions are satisfied:

- (a) The Generating Facility is capable of being constructed in phases;
- (b) The Generating Facility is specified in the GIA as being constructed in phases;
- (c) The completed phase corresponds to one of the phases specified in the GIA;
- (d) The phase has achieved Commercial Operation and the Interconnection

 Customer has tendered notice of the same pursuant to the GIA;
- (e) All parties to the GIA have confirmed that the completed phase meets the requirements set forth in the GIA and any other operating, metering, and interconnection requirements to permit generation output of the entire capacity of the completed phase as specified in the GIA;
- (f) The Network Upgrades necessary for the completed phase to meet the desired level of deliverability are in service; and
- (g) The Interconnection Customer has posted one hundred (100) percent of the Interconnection Financial Security required for the Network Upgrades for all the phases of the Generating Facility (or if less than one hundred (100) percent has been posted, then all required Interconnection Financial Security instruments to the date of commencement of repayment).

Upon satisfaction of these conditions (a) through (g), the Interconnection Customer shall be entitled to receive a partial repayment of its financed cost responsibility in an amount equal to the percentage of the Generating Facility declared to be in Commercial Operation multiplied by the cost of the Network Upgrades associated with the completed phase. The Interconnection Customer shall be entitled to repayment in this manner for each completed phase until the entire Generating Facility is completed.

A reduction in the electrical output (MW capacity) of the Generating Facility pursuant to Article 5.19.4 of the LGIA shall not diminish the Interconnection Customer's right to repayment pursuant to this GIP Section 12.3.2.2. If the GIA includes a partial termination provision and the partial termination right has been exercised with regard to a phase that has not been built, then the Interconnection Customer's eligibility for repayment under this Section as to the remaining phases shall not be diminished. If the Interconnection Customer completes one or more phases and then defaults on the GIA, the Participating TO and the CAISO shall be entitled to offset any losses or damages resulting from the default against any repayments made for Network Upgrades related to the completed phases provided that the party seeking to exercise the offset has complied

with any requirements which may be required to apply the stream of payments utilized to make the repayment to the Interconnection Customer as an offset.

Any repayment amount for completion of a phase shall include any tax gross-up or other tax-related payments associated with the Network Upgrades not refunded to the Interconnection Customer, and 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 date by the requirements of items (a) through (g) above have been fulfilled,;Generating Facility's Commercial Operation Date; or (2) any alternative payment schedule that associates the completion of Network Upgrades with the completion of particular phases and that is mutually agreeable to the Interconnection Customer and Participating TO.

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 for each phase, or portions thereof that were funded by the Interconnection Customer. Such CRRs would take effect upon the Commercial Operation Date of the phase in accordance with the GIA.

12.3.2.3 Interest Payments and Assignment Rights

, provided that such amount is paid within five (5) years of the Commercial Operation Date. Any phased or non-phased repayment pursuant to this GIP Section 12.3.2 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.

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.
		_ Annual Deliverability Assessment pursuant to GIP Section 8.
2.		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.		Requested Deliverability Status is for (check one):
	_ Ful	I 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)
	_ Par	tial Deliverability for MW of electrical output (For Independent Study Process and Queue
		uster Process only)
		ergy Only
4.	The li	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;

Maximum net megawatt electrical output (MW): or			
Net 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);		
	(5.004)		
	Cogeneration (MW)		
	Reciprocating Engine (MW)		
	Biomass (MW)		
	Steam Turbine (MW)		
	Gas Turbine (MW)		
	Wind (MW)		
	Hydro (MW)		
	Photovoltaic (MW)		
	Combined Cycle (MW)		
	Other (please describe):		
_			
	ral description of the equipment configuration (e.g. number, size, type, etc):		
d.	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);		
	Trial Operation Date:		
-	osed Trial Operation Date:		
-	osed Commercial Operation Date:		
Propo	osed Term of Service (years):		
e.	Name, address, telephone number, and e-mail address of the Interconnection		
С.	·		
	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:		
		DUNS Number:		
	f.	Approximate location of the proposed Point of Interconnection (i.e., specify transmission		
		facility interconnection point name, voltage level, and the location of interconnection);		
	g.	Interconnection Customer data (set forth in Attachment A)		
		The Interconnection Customer shall provide to the CAISO the technical data called for in GIP Appendix 1, Attachment A. Three (3) copies are required.		
5.	Applio	cable deposit amount as specified in the GIP made payable to California ISO. Send check		
	to CA	ISO (see section 7 for details) along with the:		
	Appe	ndix 1 to GIP (Interconnection Request) for processing.		
	Attacl	nment A to Appendix 1 (Interconnection Request Generating Facility Data).		
6.	Evide	Evidence of Site Exclusivity as specified in the GIP and name(s), address(es) and contact		
	inforn	nation of site owner(s) (check one):		
		Is attached to this Interconnection Request		
	in acc	Deposit in lieu of Site Exclusivity attached, Site Exclusivity will be provided at a later date cordance with this GIP		
7.	This I	nterconnection Request shall be submitted to the CAISO representative indicated below:		
		New Resource Interconnection		
		California ISO		
		P.O. Box 639014		
		Folsom, CA 95763-9014		
		Overnight address: <u>250 Outcropping Way151 Blue Ravine Road</u> , Folsom, CA 95630		

8.	Representative of the Interconnection Customer to contact:	
	[To be completed by the Interconnection Customer]	
	Name:	
	Title:	
	Company Name:	
	Street Address:	
	City, State:	
	Zip Code:	
	Phone Number:	
	Fax Number:	
	Email Address:	
9.	This Interconnection Request is submitted by: Legal name of the Interconnection Customer:	
	By (signature):	
	Name (type or print):	
	Title:	
	Date:	

* * *

Attachment A Generating Facility Data To GIP Appendix 1

Interconnection Request

GENERATING FACILITY DATA

•	Indu	ction Generator Data:
	A.	Rated Generator Power Factor at rated load:
	B.	Moment of Inertia (including prime mover):
	C.	Do you wish reclose blocking? Yes, No
		Note: Sufficient capacitance may be on the line now, or in the future, and the generator may self-excite unexpectedly.
	7a	Wind Generators
	Field Moto Neut	Volts: Amperes: ring Power (MW): ral Grounding Resistor (If Applicable): or K (Heating Time Constant):
		r Resistance:
	State	or Resistance:
	State	or Reactance:
		r Reactance:
		netizing Reactance:
		t Circuit Reactance:
		ing Current:
		perature Rise:
		ne Size:
		gn Letter: etive Power Required In Vars (No Load):
		ctive Power Required in Vars (No Load): ctive Power Required In Vars (Full Load):
		Rotating Inertia H: Per I Init on 100 MVA Rase

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.

11.	Inverter-Based Machines Wind Generators
	Number of generators to be interconnected pursuant to this Interconnection Request:
	Average Site Elevation: Single Phase Three Phase
	Number of inverters to be interconnected pursuant to this Interconnection Request:
	Inverter manufacturer, model name, number, and version:
	List of adjustable set points for the protective equipment or software:
	Max design fault contribution current:
	Harmonics Characteristics:
	Start-up requirements:
	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. Field Volts: Field Amperes: Motoring Power (MW): Neutral Grounding Resistor (If Applicable): I22t or K (Heating Time Constant): Stator Resistance: Stator Resistance: Stator Reactance:
	Rotor Reactance: Magnetizing Reactance: Short Circuit Reactance: Exciting Current:
	Temperature Rise:
	Frame Size:
	Design Letter:
	Reactive Power Required In Vars (No Load):
	Poactive Dower Poquired In Vars (Full Load):

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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.

* * *

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

* * *

5. Phase II Interconnection Study

5.1 Phase II Interconnection Study Procedures

The Phase II Interconnection Study, as described in GIP Section 7, for the LGIP Transition Cluster shall commence no later than one hundred twenty (120) calendar days after <u>issuance-publication</u> 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.

* * *

6. Interconnection Financial Security

The provisions of GIP Section 9 shall apply to the LGIP Transition Cluster, except that (i) the initial posting of Interconnection Financial Security under GIP 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 issuancepublication 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 GIP 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 GIP 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

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)			
(Full Capacity,			
Partial Deliverability for	MW or		
Energy only)			

NOTICE: YOUR CHOICE OF DELIVERABILITY STATUS CAN AFFECT YOUR ABILITY TO QUALIFY
YOUR GENERATING FACILITY AS A RESOURCE ADEQUACY RESOURCE OR AFFECT YOUR
TRANSACTIONS FOR SALE OF POWER. PLEASE GIVE CONSIDERATION TO YOUR CHOICE OF
DELIVERABILITY STATUS

Appendix 4 Agreement for Allocating GIP and Study Responsibilities

* * *

* * *

ATTACHMENT B

CONTACTS FOR NOTICES

[Section 4.15]

California ISO

Manager, Transmission Engineering <u>250 Outcropping Way</u> Blue Ravine Road Folsom, CA 95630

Phone: 916.351.2104 Fax: 916.351.2264

[NAME OF PTO]

[Address of PTO]

* * *
Appendix 6

Appendix A Assumptions in System Impact Study 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, Partial Deliverability, or Energy-Only)

* * *

CAISO TARIFF APPENDIX CC

Large Generator Interconnection Agreement

for Interconnection Requests in a Queue Cluster Window

that are tendered a Large Generator Interconnection Agreement on or after July 3, 2010

* * *

Article 1. Definitions

* * *

Phased Generating Facility shall mean a Generating Facility that is structured to be completed and to achieve Commercial Operation in two or more successive sequences that are specified in this LGIA, such that each sequence comprises a portion of the total megawatt generation capacity of the entire Generating Facility.

* * *

ARTICLE 5. INTERCONNECTION FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION

* *

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.

Network Upgrades common to multiple Generating Facilities, and to which the Interconnection Customer's right of suspension shall not extend, consist of Network Upgrades identified for:

- (i) Generating Facilities which are the subject of all Interconnection Requests made prior to the Interconnection Customer's Interconnection Request;
- (ii) Generating Facilities which are the subject of Interconnection Requests within the Interconnection Customer's queue cluster; and
- (iii) Generating Facilities that are the subject of Interconnection Requests that were made after the Interconnection Customer's Interconnection Request but no later than the date on which the Interconnection Customer's Phase II Study Report is issued, and have been modeled in the Base Case at the time the Interconnection Customer seeks to exercise its suspension rights under this Section.

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 Article 2.4. 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.

* * *

5.19.4 Permitted Reductions in output capacity (MW generating capacity) of the

Generating Facility. An Interconnection Customer may reduce the MW capacity of the Generating Facility by up to five percent (5%) for any reason, during the time period between the Effective Date of this LGIA and the Commercial Operation Date. The five percent (5%) value shall be established by reference to the MW generating capacity as set forth in the "Interconnection Customer's Data Form To Be Provided by the Interconnection Customer Prior to Commencement of the Phase II Interconnection Study" (Appendix B to Appendix 3 of the GIP).

The CAISO (in consultation with the applicable Participating TO(s) will consider an Interconnection Customer's request for a reduction in the MW generating capacity greater than five percent (5%) under limited conditions where the Interconnection Customer reasonably demonstrates to the Participating TO and CAISO that the MW generation capacity reduction is warranted due to reasons beyond the control of the Interconnection Customer. Reasons beyond the control of the Interconnection Customer shall include events in the nature of failure to secure required permits and other governmental approvals to construct the Generating Facility at its full MW generating capacity, if the Interconnection Customer has made diligent efforts to do so. Upon such demonstration to the reasonable satisfaction of the CAISO (after consultation with the applicable Participating TO) the CAISO will permit such reduction.

No permitted reduction of MW generation capacity under this Article shall operate to diminish the Interconnection Customer's cost responsibility for Network Upgrades or to diminish the Interconnection Customer's right to repayment for financing of Network Upgrades under this LGIA.

* * *

ARTICLE 11. PERFORMANCE OBLIGATION

* * *

11.4.1 Repayment of Amounts Advanced for Network Upgrades.

-Upon the Commercial Operation Date of a Generating Facility that is not a Phased Generating Facility, and the in-service date of the corresponding Network Upgrades, 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.

11.4.1.2 Repayment of Amounts Advanced Regarding Phased Generating Facilities

Upon the Commercial Operation Date of each phase of a Phased Generating Facility, the Interconnection Customer shall be entitled to a repayment equal to the Interconnection Customer's contribution to the cost of Network Upgrades for that completed phase for which the Interconnection Customer is responsible, as set forth in Appendix G, if all of the following conditions are satisfied:

- (a) The Generating Facility is capable of being constructed in phases;
- (b) The Generating Facility is specified in the LGIA as being constructed in phases;
- (c) The completed phase corresponds to one of the phases specified in the LGIA;
- (d) The phase has achieved Commercial Operation and the Interconnection

 Customer has tendered notice of the same pursuant to this LGIA;
- (e) All parties to the LGIA have confirmed that the completed phase meets the requirements set forth in this LGIA and any other operating, metering, and interconnection requirements to permit generation output of the entire capacity of the completed phase as specified in this LGIA;
- (f) The Network Upgrades necessary for the completed phase to meet the desired level of deliverability are in service; and
- (g) The Interconnection Customer has posted one hundred (100) percent of the

 Interconnection Financial Security required for the Network Upgrades for all the
 phases of the Generating Facility (or if less than one hundred (100) percent has
 been posted, then all required Financial Security Instruments to the date of
 commencement of repayment).

Upon satisfaction of these conditions (a) through (g), the Interconnection Customer shall be entitled to receive a partial repayment of its financed cost responsibility in an amount equal to the percentage of the Generating Facility declared to be in Commercial Operation multiplied by the cost of the Network Upgrades associated with the completed phase. The Interconnection Customer shall be entitled to repayment in this manner for each completed phase until the entire Generating Facility is completed.

A reduction in the electrical output (MW capacity) of the Generating Facility pursuant to LGIA Article 5.19.4 shall not diminish the Interconnection Customer's right to repayment pursuant to this LGIA Article 11.4.1. If the LGIA includes a partial termination provision and the partial termination right has been exercised with regard to a phase that has not been built, then the Interconnection Customer's eligibility for repayment under this Article as to the remaining phases shall not be diminished. [If the Interconnection Customer completes one or more phases and then breaches the LGIA, the Participating TO and the CAISO shall be entitled to offset any losses or damages resulting from the breach against any repayments made for Network Upgrades related to the completed phases.]

Any repayment amount for completion of a phaseSuch 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 date by which the requirements of items (a) through (g) have been fulfilledCommercial 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.

11.4.1.3 Interest Payments and Assignment Rights

–Any <u>phased or non-phased</u> 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.

11.4.1.4 Failure to Achieve Commercial Operation

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.

* * *

ARTICLE 18. INDEMNITY, CONSEQUENTIAL DAMAGES AND INSURANCE

* * *

Insurance. As indicated below, the designated Each Party shall, at its own expense, maintain in force throughout the periods noted inperiod 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 <u>any insurance</u> required to be carried by the CAISO, the State of California:

- 18.3.1 Employer's Liability and Workers' Compensation Insurance. The Participating TO and the Interconnection Customer shall maintain such coverage from the commencement of any Construction Activities providing statutory benefits for workers compensation coverage and coverage amounts of no less than One Million Dollars (\$1,000,000) for employer's liability providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located. The Participating TO shall provide the Interconnection Customer with evidence of such insurance within thirty (30) days of any request by the Interconnection Customer. The Interconnection Customer shall provide evidence of such insurance thirty (30) days prior to entry by any employee or contractor or other person acting on the Interconnection Customer's behalf onto any construction site to perform any work related to the Interconnection Facilities or Generating Facility, except in the case of the CAISO, the State of California.
- 18.3.2 Commercial General Liability Insurance. The Participating TO and the Interconnection Customer shall maintain commercial general liability insurance commencing within thirty (30) days of the effective date of this LGIA, 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. If the activities of the Interconnection Customer are being conducted through the actions of an Affiliate, then the Interconnection Customer may satisfy the insurance requirements of this Section 18.3.2 by providing evidence of insurance coverage carried by such Affiliate and showing the Participating TO as an additional insured, together with the Interconnection Customer's written representation to the Participating TO and the CAISO that the insured Affiliate is conducting all of the necessary preconstruction work. Within thirty (30) days prior to the entry of any person on behalf of the Interconnection Customer onto any construction site to perform work related to the Interconnection Facilities or Generating Facility, the Interconnection Customer shall replace any evidence of Affiliate Insurance with evidence of such insurance carried by the Interconnection Customer, naming the Participating TO as additional insured.
- 18.3.3 Business Automobile Liability Insurance. Prior to the entry of any such vehicles on any construction site in connection with work done by or on behalf of the Interconnection Customer, the Interconnection Customer shall provide evidence of 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. Upon the request of the Participating TO, the Interconnection

<u>Customer shall name the Participating TO as an additional insured on any such policies.</u>

- 18.3.4 Excess Public Liability Insurance. Commencing at the time of entry of any person on its behalf upon any construction site for the Network Upgrades, Interconnection Facilities, or Generating Facility, the Participating TO and the Interconnection Customer shall maintain 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. Such insurance carried by the Participating TO shall name the Interconnection Customer as an additional insured, and such insurance carried by the Interconnection Customer shall name the Participating TO as an additional insured.
- 18.3.5 The Commercial General Liability Insurance, Business Automobile Insurance and Excess Public Liability Insurance policies shall name the other Parties identified in the sections above, 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 of cancellation in coverage or condition. If any Party can reasonably demonstrate that coverage policies containing provisions for insurer waiver of subrogation rights, or advance written notice are not commercially available, then the Parties shall meet and confer and mutually determine to (i) establish replacement or equivalent terms in lieu of subrogation or notice or (ii) waive the requirements that coverage(s) include such subrogation provision or require advance written notice from such insurersprior to anniversary date of cancellation or any material change in coverage or condition.

* * *

18.3.10 Notwithstanding the foregoing, each Party may self-insure

a) to meet the insurance requirements of Article 18.3.1, to the extent that it maintains a self-insurance program that is a qualified self insurer within the state in which the Point of Interconnection is located, under the laws and regulations of such state; and

<u>b)</u> 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.

* * *

Attachment C Table of GIP Phase 2 Changes

ATTACHMENT C

Table of GIP Phase 2 Changes

Locations of Associated Tariff Changes	Item # – Section of GIP Phase 2 Revised Draft Final Proposal
Appendix Y (i.e., GIP) Section 8.4	Item #1 – Section 7.2.2 (generators interconnecting to non-PTO
	facilities situated inside the ISO balancing authority area)
Tariff Section 37.9.4; GIP Sections 6.8, 6.9, 6.10,	Item #2 – Section 7.2.3
7.5, 7.7, 9.2.2, 9.3.1.2, 11.2	(trigger for interconnection financial security posting deadlines and
	correction of inaccurate cross reference)
GIP Section 9.3.2	Item #3 – Section 7.2.4 (definitions of start of construction and
	other transmission construction phases, and posting requirements
	at each milestone)
GIP Section 3.6	Item #4 – Section 7.2.6 (information provided by the ISO through
	internet postings)
Appendix CC (i.e., LGIA) Article 5.19.4	Item #5 – Section 7.3.2
	(reduction in generator project size for permitting or other
	extenuating circumstances)
GIP Sections 1.2.2, 12.3.2, LGIA Articles 1,	Item #6 – Section 7.3.3 (repayment of interconnection customer
11.4.1; Appendix T (<i>i.e.</i> , SGIA) Article 5.3.1,	funding for network upgrades associated with a phased generating
Attachment 1	facility)
Tariff Section 25.1; GIP Sections 4.2.1, 5.1	Item #7 – Section 7.3.6 (accommodation of qualifying facility
	conversions, repowering, deliverability at distribution level, and
	other special circumstances associated with small projects)
GIP Sections 9.3.1.1, 9.3.1.2, 9.3.2, 9.3.3	Item #8 – Section 7.4.1
	(second and third interconnection financial security posting
	requirements to offset PTO-funded network upgrades)
LGIA Article 18.3	Item #9 – Section 7.4.2 (interconnection agreement insurance
	requirements)
GIP Section 2.4.3	Item #10 – Section 7.4.3
	(adjusted vs. non-adjusted dollars in interconnection study reports

Locations of Associated Tariff Changes	Item # – Section of GIP Phase 2 Revised Draft Final Proposal
	and interconnection agreements)
GIP Sections 6.7, 9.5	Item #11 – Section 7.4.4
	(financial responsibility cap and maximum cost responsibility)
GIP Sections 9.2.1, 9.2.4, 9.3.1.3	Item #12 – Section 7.4.5
	(posting cap to financial security postings of a PTO's interconnection facilities)
LGIA Article 5.16	Item #13 – Section 7.4.7 (interconnection agreement suspension rights)
Tariff Section 24.4.6.5; GIP Sections 12.2.2,	Item #14 – Section 7.4.8 (Participating TO cost recovery)
12.3.1; LGIA Article 5.16	
GIP Sections 2.4.3, 4.6, 6.5.2.1, 6.5.2.2, 6.9.3,	Item #15 – Section 7.5.1
6.9.4, 7.1; GIP Appendix 1; GIP Appendix 3, at Appendix A; GIP Appendix 6, at Appendix A	(partial deliverability as an interconnection option)
SGIA Attachment 7	Item #16 – Section 7.5.2 (technical requirements under an
SGIA Attacriment 7	interconnection agreement)
GIP Sections 6.4, 6.5.2.2, 7.4	Item #17 – Section 7.5.3
	(off-peak deliverability assessment)
GIP Section 7.1	Item #18 – and Section 7.5.4 (operational partial and interim
	deliverability assessment)

Attachment D Revised Draft Final Proposal



Revised Draft Final Proposal

Generator Interconnection Procedures Phase 2 ("GIP 2")

June 30, 2011 Market and Infrastructure Development

Revised Draft Final Proposal Generator Interconnection Procedures Phase 2

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1. Executive Summary

The GIP 2 initiative is an effort to incorporate a variety of improvements into the ISO's generator interconnection procedures ("GIP"). These subject matter of these improvements extends across each of the three tracks under which the ISO processes generator interconnection requests: the Cluster Study process, which is the default process for most interconnection requests, and the Independent Study and Fast Track processes which provide for more rapid processing for certain qualified generation projects. The GIP 2 initiative addresses 26 distinct proposal items that have been logically grouped for discussion purposes into the following major work group areas or categories:

- Work Group 1 Developing greater integration between the GIP and the ISO's transmission planning process ("TPP"), to allow transmission expansion decisions to be made in a more comprehensive and holistic manner, to make more cost-effective use of ratepayer funding for transmission expansion, and to provide a basis for distinguishing between network upgrades that should be developed under the TPP with full funding by transmission ratepayers versus network upgrades for which the interconnection customer should bear non-refundable cost responsibility. Because of the complexity of this subject the ISO has decided to remove it from the GIP 2 initiative, and to create a separate, high-priority initiative.
- Work Group 2 1) Re-issuing study reports when errors or omissions occur, 2) adding steps through the Phase I and Phase II study process to help customers address modifications to their project and study reports, 3) a process to clarify how generators can interconnect to non-PTO facilities inside the ISO balancing authority area ("BAA") and have the ISO conduct deliverability studies, 4) developing greater understanding around the per-unit cost estimates the PTOs provide to the interconnection customers, 5) Identifying what information the ISO posts to both secure and non-secure ISO websites, 6) Coordinating with the PTOs to ensure interconnection customers are notified of changes to security postings amounts.
- Work Group 3 1) Adding pro forma partial termination provisions for phased projects to the GIP, 2) allowing projects to receive partial repayment of their security when phased projects reach commercial operation, 3) allowing projects the flexibility to reduce their size due to unforeseen permitting constraints without triggering a breach of the LGIA, 4) clarifying interconnection requirements to accommodate the CPUCs new Renewable Auction Mechanism, 5) clarifying procedures and adding new features for projects repowering, those converting from Qualifying Facility ("QF") status to commercial operations and in the Fast Track study track, 6) clarifying deliverability issues for QF conversions and distributed generation.
- Work Group 4 1) Developing provisions to make the ISO's financial posting waiver for PTO upfront funded network upgrades a permanent feature, 2) revising LGIA insurance requirements to ensure coverage is appropriate for all parties, 3) standardizing the accounting of future costs for interconnection and network upgrades in LGIAs for SDGE, SCE and PG&E, 4) clarifying the ISOs position that a customer's responsibility for network upgrades is the higher of the Phase I or Phase II study report results, 4) modifying the financial security posting requirements so that the posting amount calculations are the same for the PTO interconnection facilities and the network upgrades.

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Work Group 5 – 1) Adding more study options for customers seeking partial deliverability in between the Phase I and Phase II study process, 2) conforming voltage requirements for both the large and small generators, 3) clarify that the off-peak deliverability studies are performed for informational purposes only, 4) Making permanent the ISOs annual advisory deliverability assessment and also providing an opportunity for an Net Qualifying Capacity ("NQC") assessment a generator can use to receive RA deliverability counting credit in the next year assessment

This revised draft final proposal is a follow-up to the ISO's GIP 2 draft final proposal that was posted on May 27, 2011 and the subsequent round of stakeholder and work group meetings and written comments where stakeholders focused on the May 27 draft final proposal. Based on the input received from stakeholders the ISO has made many changes to the May 27 draft final proposal. These changes are summarized here and described in detail in the full discussion of each topic in Section 7 of this paper.

Following the publication of this revised draft final proposal, the ISO will conduct a stakeholder meeting on July 7, followed by a series of work group meetings and an opportunity for stakeholders to submit written comments. The ISO will proceed to develop Board documents for the August Board of Governors meeting, where ISO management will present the final GIP 2 proposal for Board approval.

Work Group 1 Items

As the ISO indicated in the May 27, 2011 draft final proposal document, the ISO has taken the Work Group 1 items out of the GIP proposal for treatment on a separate stakeholder track.

Work Group 2 Items

The following list represents the main changes to the Work Group 2 items

7.2.1. PTO per-unit cost estimation

Added the wording - The ISO will work with the PTOs to ensure that appropriate and consistent cost development philosophy and methodology are being used regarding *anticipated* costs of upgrades.

- 7.2.3. Triggers for Financial Security Posting Deadlines
- Change to deadlines for ISO/PTO to amend a final study report when warranted from 10 to 15 business days.
- Changes to a substantial error or omission:
 - When changes the cost by a minimum percentage of the either the network upgrades or Participating TO interconnection facilities by more than 5% (from 1%) or \$1,000,000 dollars (from \$1,000), or delays the schedule that the proposed generating facility can obtain commercial operation by more than six months (from 90 days).
- Added A dispute over the plan of service by an interconnection customer shall not be considered a substantial error or omission unless the interconnection

¹ The draft final proposal and submitted stakeholder comments are available from the ISO's GIP 2 web page: http://www.caiso.com/2b21/2b21a4fe115e0.html.

customer can demonstrate that the plan of service was based on an invalid or erroneous study assumption that if corrected would meet the criteria above for a substantial error or omission.

7.2.5. Notification of Interconnection Financial Security ("IFS") posting Added the following:

- Interconnection customers and a Participating TO will sometimes agree to commence work early under a letter agreement (or in the form of an engineering and procurement agreement), with a security posting attached to this early work. A procedure describing the interrelation between the letter agreement posting, the second IFS posting and the start of construction posting, will be developed to prevent redundant posting for work secured under the letter agreement.
- A procedure describing the process for interconnection IFS posting requirements when the network upgrades related to a single project or projects in a study group require network upgrades on more than one Participating TO's system.

Work Group 3 Items

The ISO has changed many aspects of partial termination provisions since the draft final.

- Partial termination eligibility will not be available for projects when the multiplier percentage is above 50%.
- Only 50% instead of 75% of plant size will be eligible for partial termination.
- Additional partial termination cost provisions have been added based on the prior two LGIAs incorporating these provisions.
- The partial termination multiplier calculation is being changed to reduce the amount of cluster study groups used in the denominator
- For section 7.3.6 on repowerings, under Path 4 for the Independent Study Process, deliverability provisions are being referenced to Appendix Y section 8.2.

Work Group 4 Items

Additional detail was provided on interconnection customer posting requirements in section 7.4.1. A small revision to stakeholder comments to address liability coverage in section 7.4.2, subsection 18.3.1 was added. A proposal to modify the financial security postings requirements for PTOs interconnection facilities to mirror the posting amounts required for Network Upgrades was added. The ISO has addressed the SCE abandoned plant concepts and has added several proposals for abandoned plant protections. In addition, the ISO is proposing to incorporate additional suspension provisions under Article 5.16 of the pro forma LGIA.

Work Group 5 Items

The ISO has provided additional procedures to the study process for partial deliverability to reconcile the requested level of deliverability with changes in the plan of service, and financial security postings.

2. Introduction

The ISO presents the revised draft final proposal for the GIP 2 stakeholder process to develop further enhancements to its Generation Interconnection Procedures.

This revised draft final proposal incorporates;

- The topics raised in the ISO's draft final proposal document issued May 27, 2011.²
- Refinements developed through work group meetings and stakeholder comments to the work group discussions. These work group meetings took place over the period of June 14 through June 18, 2011.
- In addition, the ISO has included certain other topics that are ancillary to either the revised draft final proposal topics or items that the ISO or stakeholders raised in the work group sessions and comments to those session discussions.

This 2011 GIP 2 effort is a continuation of the process commenced last year, which began with considerations for refinement of the small generator interconnection process ("SGIP") and culminated in a process which combined, harmonized and improved the small and large generator interconnection procedures into a single process, known simply as the Generator Interconnection Procedures (GIP).³ The GIP established three primary processing tracks: (1) a cluster study track, which serves as the default process and primary track; (2) an independent study process (ISP) track which allows certain projects to proceed independently of the cluster on a faster study track; and (3) a fast track process which is more broadly applicable than the FERC 2006 SGIP and available for certain generation projects of up to 5 MW.

The specific topics the ISO considered for inclusion in the GIP-2 scope come from several sources.

- First, in the course of last year's GIP stakeholder process, stakeholders and the ISO identified additional issues that warrant further consideration but could not be addressed at that time. The ISO listed these issues in Section 8 of its draft final proposal for the 2010 GIP initiative.⁴
- Second, the ISO's revised transmission planning process ("RTPP") (filed with FERC in June 2010 and conditionally accepted on December 16, 2010)⁵ included significant steps toward greater integration between the generator interconnection and transmission planning processes, and also identified and deferred some interconnection policy issues for resolution in the 2011 GIP 2 initiative.
- Third, as the ISO has been negotiating large generator interconnection agreements ("LGIAs")⁶ over the past few months with interconnection customers ("ICs") and

² The ISO draft final proposal document can be accessed on the ISO's website at http://www.caiso.com/2b60/2b60db343d0a0.pdf.

³ .The Federal Energy Regulatory Commission's ("FERC") conditionally accepted the GIP on December 16, 2010 in Order Conditionally Accepting Tariff Revisions 133FERC ¶61,223 (December 16, 2010), and the ISO's compliance filing in FERC's Letter Order in Docket No ER-11-1830-001, dated March 28, 2011.

⁴The GIP draft final proposal is posted on the ISO website at http://www.caiso.com/27d9/27d91299c74670.pdf.

⁵ 133FERC¶61,224 FERC Order on RTPP

⁶ The GIP 2 changes that would result from this stakeholder initiative would be incorporated into LGIAs or Small Generator Interconnection Agreements ("SGIAs"), or both, as appropriate.

participating transmission owners ("PTOs"), the parties to these LGIAs have identified needs for new LGIA provisions which the ISO viewed as appropriate but could be adopted only as non-conforming provisions absent a stakeholder process to amend the pro forma LGIA.

• Fourth, through work group meetings and comments filed in response to the issue paper, the ISO has selected six additional topics to include in GIP 2.

The list of topics includes 26 items for inclusion in the scope of this GIP 2 stakeholder effort. The ISO intends that once the items in scope are finalized in this stakeholder process, they will be placed on one of four tracks for resolution through this initiative and either presented to the ISO Board of Governors at the August Board of Governors meeting: (1) ISO's Business Practice Manual Change Management process for inclusion in Business Practice Manuals, or (2) as a proposed amendment to ISO Tariff Appendix Y, or (3) deferred to GIP 3, or (4) continue on its own track following the completion of stakeholder activities.

This timetable is important for a number of reasons. First, it will enable parties that will be negotiating LGIAs in the latter part of 2011 to utilize the new provisions, which are intended to be more efficient in that they would incorporate into the ISO pro forma interconnection large interconnection agreement as standard options certain reoccurring provisions that rendered transition cluster LGIAs to be non-conforming agreements, requiring a more lengthy LGIA completion process. Second, it will provide much greater certainty to interconnecting generators regarding FERC's acceptance of these new provisions if they become part of the tariff and pro forma LGIA. Third, it will allow for more timely LGIA execution for ICs that intend to qualify for federal American Recovery and Reinvestment Act (ARRA) cash grants by completing required milestones by the end of 2011.

It is important to understand that failure to resolve a topic in time for an August decision by the ISO Board of Governors does not mean indefinite deferral of the item. The ISO is committed to steadily improving its GIP to reflect changes in the industry and the needs of its generation interconnection customers (ICs). The ISO therefore intends to conduct subsequent GIP enhancement initiatives, possibly annually if needed, to keep pace with an electricity sector that is evolving more rapidly than ever before.

The ISO has been focused on interconnection reform and revision for a number of years. In 2008, the ISO implemented fundamental generator interconnection reforms that, among other things, abandoned the prior serial study approach in favor of a new cluster approach and introduced new financial security provisions intended to reduce the then-existing project backlog and provide developers with greater cost and schedule certainty. The ISO followed up these reforms in September 2009 with additional modifications that recalibrated the financial security posting provisions to align better with existing economic conditions. In August 2010, the ISO obtained authority to waive financial security postings for network upgrades funded by PTOs. 8

Most recently, in October 2010, in response to a proliferation of small generation interconnection requests, the ISO filed a proposal to combine its small and large generation interconnection study process into a single cluster study approach, which FERC approved in a December 16, 2010 order. This reform will significantly streamline the overall interconnection

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⁷ Order Conditionally Approving Tariff Amendment 124FERC¶61,292 (September 26, 2008) (generator interconnection reform tariff amendment to study projects in clusters)

⁸ 132FERC¶61,132 FERC Order on waiver of tariff provisions

study process and provide greater cost and schedule certainty to small generators, which now account for over 3,000 MW of renewable resources in the ISO's current interconnection queue.

Thus, given the large list of potential topics for consideration with stakeholders that could lead to GIP enhancements, the present GIP-2 initiative should not be viewed as the final opportunity to obtain beneficial improvements to the GIP, but only as a significant effort to address the most urgent needs.

3. Stakeholder Process and Next Steps following issuance of this Revised Draft Final Proposal Document

The ISO's timeline below outlines the anticipated stakeholder process timeline. The items in red have been undertaken already; the ISO proposes the timeline of the remaining activities in order to complete the GIP-2 issues and receive a FERC ruling before the end of 2011.

Feb 24 2011	Post Issue paper
Mar 1	Post agenda and presentation for March 3 meeting
Mar 3	Hold stakeholder meeting
Mar 10	Receive stakeholder written comments on issue paper
Mar 14-18	Work group meetings
Apr 14	Post straw proposal
Apr 26	Post agenda and presentation for April 28 meeting
Apr 28	Hold stakeholder meeting
May 5	Receive stakeholder comments on straw proposal
May 9-13	Work group meetings
May 27	Post draft final proposal
Jun 1	Post agenda and presentation for June 3 meeting
Jun 3	Hold stakeholder meeting
Jun 10	Receive stakeholder written comments on draft final proposal
Jun 13-17	Work Group meetings
Jun 30	Post revised draft final proposal
Jul 5	Post agenda and presentation for July 7 meeting
Jul 7	Hold stakeholder meeting
Jul 14	Receive stakeholder written comments on revised draft final proposal
Aug 24-25	Present proposal to ISO Board of Governors
Aug & Sep	Work with stakeholders on tariff language
Oct 1	File tariff language at FERC
Dec 1	
Dec 1	Order issued by FERC (60 days after Oct 1 filing)

The ISO created a web page for this initiative which is found at the following link: http://www.caiso.com/2b21/2b21a4fe115e0.html.

As noted in the introduction, this revised draft final proposal offers the ISO's more refined proposals that were developed in the May 27 draft final proposal document published for the GIP-2 initiative. The immediate next steps, then, are for stakeholders to consider the revised draft proposal as well as the detailed descriptions and to offer comments both in the discussion at the July 7th meeting and in written form by July 14th. The ISO will not be able to process stakeholder comments into the Board package for those submitted after the July 14 deadline. The ISO requests that stakeholders comment on the merits of each proposal and any

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suggestions for improvements with a supporting business case. In all cases the comments will be most useful if parties clearly explain the business rationale for their recommendations. The ISO will consider these comments in preparing the Board documents for the August 24-25 ISO Board of Governors meeting.

4. Topics included in this Revised Draft Final Proposal Document

The scope of the revised draft final proposal includes the following topics. This list includes the items in the straw proposal as well as three new topics raised by stakeholders. The ISO also proposes to revise tariff sections on study deposit and financial security as they refer to outdated tariff sections.

The following twenty-six topics are included in the revised draft final proposal.

- 1. PTO per-unit cost estimation and methodology for estimating costs of network upgrades and PTO interconnection facilities;
- 2. Generators interconnecting to non-PTO facilities in the ISO BAA;
- Triggers for Financial Security Posting Deadlines and modifications to Tariff section 37.9 to manage forfeited Study Deposit funds and to no longer reference Tariff section 11.8.5.3 which no longer exists;
- 4. Clarify definitions of start of construction and other transmission construction phases, and specify posting requirements at each milestone;
- 5. Improve process for interconnection customers to be notified of their required amounts for Interconnection Financial Security posting;
- 6. Clarify ISO information provision to assist ICs;
- 7. Provisions for partial termination of an LGIA or when permitting difficulties hinder a project reaching its studied amount;
- Reduction in project size for permitting or other extenuating circumstances;
- Repayment of IC funding for network upgrades associated with a phased generation facility;
- 10. Clarify site exclusivity requirements for projects located on BLM-administered federal lands;
- 11. CPUC Renewable Auction Mechanism requirement for projects to be in the interconnection queue;
- 12. Interconnection Refinements to Accommodate QF conversions, Repowering and other Special Circumstances Associated with Smaller Projects:
- 13. Behind the meter expansion;
- 14. Specify appropriate security posting requirements where the PTO elects to upfront fund network upgrades;
- 15. Revise ISO insurance requirements (downward) in the pro forma LGIA to better reflect ISO's role in and potential impacts on the three-party LGIA:
- 16. Standardize the use of adjusted versus non-adjusted dollar amounts in LGIAs currently different conventions are used by the different PTOs;

- 17. Clarify the Interconnection Customers financial responsibility cap and maximum cost responsibility;
- 18. Consider adding a "posting cap" to security postings for the PTO's Interconnection Facilities;
- 19. Consider using generating project viability assessment in lieu of financial security postings (new topic section 6.4.6);
- 20. Consider limiting interconnection agreement suspension rights (new topic section 6.4.7);
- 21. Consider incorporating PTO abandoned plant recovery into GIP (new topic section 6.4.8);
- 22. Partial deliverability as an interconnection option;
- 23. Conform technical requirements for small and large generators to a single standard, and develop study methodology to determine voltage impacts pursuant to FERC's 2010 order on ISO's proposed new interconnection standards;
- 24. Revisit tariff requirement for off-peak deliverability assessment;
- 25. Annual updating of ISO's advisory course for partial deliverability assessment; and
- 26. Post Phase II reevaluation of plan of service (new topic section 6.5.5).

5. Changes from the Draft Final to the Revised Draft Final Proposal

Work Group 2 Items

The following list represents the main changes to the Work Group 2 items

7.2.1. PTO per-unit cost

Added the wording - The ISO will work with the PTOs to ensure that appropriate and consistent cost development philosophy and methodology are being used regarding *anticipated* costs of upgrades.

- 7.2.3. Triggers for Financial Security Posting Deadlines
- Change to deadlines for ISO/PTO to amend a final study report when warranted from 10 to 15 business days.
- Changes to a substantial error or omission:
 - When changes the cost by a minimum percentage of the either the network upgrades or Participating TO interconnection facilities by more than 5% (from 1%) or \$1,000,000 dollars (from \$1,000), or delays the schedule that the proposed generating facility can obtain commercial operation by more than six months (from 90 days).
- Added A dispute over the plan of service by an interconnection customer shall not be considered a substantial error or omission unless the interconnection customer can demonstrate that the plan of service was based on an invalid or erroneous study assumption that if corrected would meet the criteria above for a substantial error or omission.

7.2.5. Notification of IFS posting

Added the following:

- 3. Interconnection customers and a Participating TO will sometimes agree to commence work early under a letter agreement (or in the form of an engineering and procurement agreement), with a security posting attached to this early work. A procedure describing the interrelation between the letter agreement posting, the second IFS posting and the start of construction posting, will be developed to prevent redundant posting for work secured under the letter agreement.
- 4. A procedure describing the process for interconnection IFS posting requirements when the network upgrades related to a single project or projects in a study group require network upgrades on more than one Participating TO's system.

Work Group 3 Items

The ISO has changed several aspects of partial termination provisions.

- Partial termination eligibility will not be available for projects when the multiplier percentage is above 50%.
- Only 50% instead of 75% of plant size will be eligible for partial termination.
- Additional partial termination cost provisions have been added based on the prior two LGIAs incorporating these provisions.
- The partial termination multiplier calculation is being changed to reduce the amount of cluster study groups used in the denominator
- Under Path 4 for the Independent Study Process, deliverability is now being referenced to Appendix Y section 8.2.

Work Group 4 Items

Additional detail was provided on interconnection customer posting requirements in section 7.4.1. A small revision to stakeholder comments to address liability coverage in section 7.4.2, subsection 18.3.1 was added. A proposal to modify the financial security postings requirements for PTOs interconnection facilities to mirror the posting amounts required for Network Upgrades was added. The ISO has addressed the SCE abandoned plant concepts and has added several proposals for abandoned plant protections. In addition, the ISO is proposing incorporate additional suspension provisions under Article 5.16 of the pro forma LGIA.

Work Group 5 Items

The ISO has provided additional procedures to the study process for partial deliverability to reconcile the requested level of deliverability with changes in the plan of service.

6. Stakeholder Comments on May 27 Draft Final Proposal

The ISO released its GIP 2 draft final proposal on May 27, 2011. The comment template posted by the ISO asked stakeholders to rate each one of the topics under consideration and provide other suggested topics. The following companies provided comments on the draft final proposal: BAMx ("Bay Area Municipal Transmission Group"), CalWEA ("California Wind Energy Association"), LSA ("Large-scale Solar Association"), Clean Coalition, California Municipal Utilities Association ("CMUA"), First Solar, GenOn, Ormat, PG&E ("Pacific Gas & Electric"), SCE

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("Southern California Edison"), SDG&E ("San Diego Gas & Electric"), Six Cities, Wellhead, NextEra, LS Power, Independent Energy Producers ("IEP")

6.1. Work Group 2 Comments - Queue and Study Process

Stakeholder Input: SCE agrees with a common format for calculating per-unit costs estimates among PTOs and that more explanation is required to ensure the cost guide is unambiguous and transparent. SCE adds the ISO should define what an error or omission is regarding changes to the plan of service. SCE agrees that that LGIA is the best place to negotiate phasing of the third posting of financial security and provided a template to determine how this would be done. SDG&E agrees that PTOs should use a common format for presenting per unit cost information. SDG&E also supports that if report revisions become necessary (due to errors or omissions), the CAISO should establish a policy for extending the deadlines for Phase I or Phase II security postings. SDGE also provided proposed tariff language on how the third financial security posting in section 7.2.4. SDG&E suggests and supports development of a procedure to alleviate confusion as experienced in the most recent security postings following Cluster 2 Phase I. SDG&E proposes that the CAISO should provide to parties a summary of the IC's financial security amounts due, due dates, and details of calculations and cost allocations between PTOs for network upgrades in advance of, or at the Phase I and Phase II Results Meetings. SDG&E supports CAISO efforts to develop a procedure and responsibility document in coordination with the PTO. PG&E is committed to working with the CAISO, other PTOs and stakeholders to implement a common format, develop common methodologies for cost factors, and provide adequate explanations of various components of the per-unit-cost process. PG&E supports the CAISO's proposal and appreciates the CAISO's willingness to accommodate projects that are already in the study process, or have completed their studies with the host non-PTO in CAISO-BAA utility.

The Six Cities support the ISO's proposed process and criteria for conducting deliverability assessments for generators interconnecting to non-PTO facilities within the ISO's BAA. The Six Cities support the ISO's proposals to allow Interconnection Customers to submit comments on draft study reports and to allow the indicated extensions to security posting deadlines when there are material changes to study reports. CalWEA supports per-unit cost standardization and states the ISOs proposal continues to ignore the specific stakeholder concerns with the current process that unreasonably increase the Phase I Study cost estimates to the extent that they do not function as an effective cost cap, as intended by the earlier GIPR reform. CalWEA supports the ISOs proposal to interconnect generators to non-PTO facilities but notes the final Proposal should clearly state the CAISO's intent to work with non-PTOs to establish the enabling agreements and other arrangements needed to facilitate the same coordinated treatment currently afforded under the PTO Wholesale Distribution Access Tariff ("WDAT") framework. Invenergy states the tariff should clarify that demonstration of an agreement for firm transmission service from the generator's point of interconnection to the point of delivery to the ISO system is sufficient to ensure that there is adequate transmission on the non-PTO's transmission system for the project to be deemed fully deliverable.

SDGE raised an issue during work group meetings regarding how financial security postings would be affected when multiple PTOs are required to build network upgrades. The ISO has added this topic in the proposal and will address this concern during BPM development.

PG&E proposed to add language to a new paragraph in Appendix Y section 9.3.2 which describes how posting amounts can be separated to account for discrete components. This

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new text would have given the PTOs additional flexibility to manage this process. Although the ISO is sympathetic to this situation, more time is needed to evaluate this concern.

6.2. Work Group 3 Comments – Non-Conforming Provisions

Stakeholder Input: SCE continues to have strong reservations about the partial termination provisions and does not believe they warrant inclusion as a permanent feature to the tariff. SCE also states the 75% reduction in project size is too large and that the amount offered to generators should be 25-50%. SCE supports the reduction in project size for permitting. SDG&E agrees with PG&E that projects should utilize multiple interconnection requests and that an option to downsize a project could result in a transmission plan that overbuilds. SDG&E believes allowing projects to be phased will lead to delays in completion of the LGIA. SDG&E reiterates its comments provided to the GIP 2 Issues Paper and again to the Straw Proposal that the CAISO tariff should be more specific about Material Modifications. SDG&E agrees that if an existing QF is making changes that do not implicate the interconnection process and its commercial status is also not being altered, then no requirement for a Generation Interconnection Agreement should be required.

PG&E does not support the partial termination provisions as outlined as such drastic changes in the build-out of a project at a late stage in the interconnection process does not send the right signals. PG&E would support a lower partial termination eligibility range of 25% of plant size. PG&E also believes the multiplier percentage should have a ceiling of 100% rather than the 50% the ISO proposes. PG&E does support the proposal to allow for repayment of IC funding of network upgrades associated with a phased generation facility. PG&E has expressed its support of the proposal to apply the Fast Track to existing repowering projects. However, as noted in the stakeholder meetings, PG&E has concerns about the applicability of the existing Fast Track screens to transmission facilities and notes they have concerns about the applicability of the existing Fast Track screens to transmission facilities. The Six Cities continue to oppose the ISO's suggested modification of security posting requirements to allow interconnection customers to negotiate deferred posting of security for later stages of phased construction projects. The Six Cities generally support the concept of a partial termination provision that would allow generators to phase their projects subject to a partial termination charge that is based on the risk to ratepayers of stranded investment and suggest the cap should be at 100%. The Six Cities support the ISO's proposed treatment of requests to reduce project size due to environmental or permitting restrictions and, in particular, support the proposed principle that downsizing a project will not reduce the interconnection customer's network funding obligation, accelerate repayment of funding for network upgrades, or modify posting requirements. GenOn supports the proposal to extend the availability of the Fast Track, but suggests the CAISO expand this reference to more broadly facilitate the interconnection of existing projects that are repowered or reconfigured.

6.3. Work Group 4 Comments - Interconnection Cost and Security Requirements

Stakeholder Input:

In general, stakeholders asked for additional refinements to topics rather than objections to the draft final proposal elements grouped into work group 4. For example, in the draft final proposal, the ISO agreed to add a cap to the financial security postings for the PTO's

Interconnection Facilities (carrying over the caps for Network Upgrades, such that the first security posting shall not exceed 7.5 million and the second security posting shall not exceed \$15 million). In response to this addition in the draft final proposal, CalWEA and LSA included comments asking for further detail refinement to define what constitutes a PTO's Interconnection Facility for purposes of financial postings.

In the work group discussions following the May 17 draft final proposal,, SCE provided further information and detail surrounding its proposal to add components of the FERC concept of "abandoned plant approval" or "abandoned plant cost recovery" into the ISO tariff in circumstances where SCE believes that application of the GIP or TPP (ISO Tariff Section 24) requires the PTO to "involuntarily fund" network upgrades. Though these discussions, ISO understands SCE to have identified - four circumstances where it believes that the contingency may arise where the PTO may be required to fund interconnection network upgrades. The ISO has included proposal items in this revised draft proposal to address these issues.

6.4. Work Group 5 Comments – Technical Assessments

Stakeholder Input: In stakeholder comment, SCE stated that it views the operational deliverability assessment as an "important step in the right direction towards solving some of SCE's concerns regarding the deliverability methodology employed by the CAISO" and that the ISO's statements in the GIP stakeholder process that there are existing mechanisms for "coordination" between PTOs and CAISO for re-evaluating plans of service in a post-Phase II study environment. In its stakeholder comments, PG&E supported the notion of partial deliverability as an option and appreciated the CAISO's clarification that if an interconnection customer applies for partial deliverability and all the necessary network upgrades are completed based on that application, that the interconnection customer will have an NQC that is based on that determined amount of deliverability, and is not advisory. PG&E noted that it generally supports conforming the requirements of small and large generators to s single standard and requests clarification regarding how to address differing requirements in Appendix H of the LGIA as compared to the PTO Interconnection Handbooks. PG&E strongly supports the CAISO's updated proposal on partial and interim deliverability and appreciates the CAISO's responsiveness to stakeholder comments. PG&E believes it is worth continuing a dialogue about the post phase II re-evaluation in cases where a large number of projects dropping out such that a major reduction in the plan of service might make sense. This will most likely benefit the remaining generators in the queue as well as transmission customers.

The Six Cities support the proposal for adoption of explicit provisions allowing PTOs to request re-evaluation of the post-Phase 2 Plan of Service, including removal of network upgrades that are no longer required due to withdrawing generation from the pre-cluster base cases for future cluster studies. CalWEA appreciates the CAISO's willingness to address partial and interim deliverability and supports the Proposal. However, CalWEA asks that the CAISO clarify that use of existing deliverability by Full Capacity interconnection customers be given priority over assignment of such capability to those seeking deliverability through the separate annual CAISO assessment.

6.5. Topics ISO plans to address through BPM Process or Tariff Amendment for August Board Meeting

After the August Board meeting the ISO will implement the following sections through either the BPM change management process or Tariff.

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- Section 7.2.1, PTO per-unit costs BPM
- Section 7.2.2, Generators interconnecting to non-PTO facilities Tariff
- Section 7.2.3, Triggers for Financial Security Postings Tariff
- Section 7.2.4, Start of construction definition Tariff
- Section 7.2.5, Notification to customers of changes in Financial Security Postings BPM
- Section 7.2.6, ISO information BPM
- Section 7.3.1, Partial Termination Tariff
- Section 7.3.2, Reduction in project size Tariff
- Section 7.3.3, Repayment of IC funding of network upgrades Tariff
- Section 7.3.4, Site Exclusivity BPM
- Section 7.3.5, Renewable Auction Mechanism BPM
- Section 7.3.6, Refinements to repowering facilities Tariff
- Section 7.4.1, PTO upfront waiver Tariff
- Section 7.4.2, LGIA insurance requirements Tariff
- Section 7.4.3, Adjusted vs. non-adjusted dollars in study reports Tariff
- Section 7.4.4, Maximum cost responsibility Tariff
- Section 7.4.5, Security posting caps Tariff
- Section 7.4.6, Project viability assessment for financial postings -N/A
- Section 7.4.7, Suspension rights -N/A
- Section 7.4.8, Abandoned plant provisions N/A
- Section 7.5.1, Partial Deliverability Tariff
- Section 7.5.2, Conform technical requirements under the LGIA Tariff
- Section 7.5.3, Off-peak deliverability assessment Tariff
- Section 7.5.4, Partial deliverability Tariff
- Section 7.5.5, Post phase II re-evaluation Tariff

7. GIP-2 Revised Draft Final Proposals

This section presents the ISO's revised draft final proposals for the GIP 2 topics listed above, listed by work group.

7.1. Work Group 1 – GIP Cost Assessment Provisions

The ISO has begun a new initiative to integrate the TPP and GIP to allow transmission expansion decisions to be made in a more comprehensive manner. The ISO has developed a TPP GIP Integration timeline and provides the following schedule:

- July 21 Post straw proposal
- July 28 Stakeholder meeting
- Sep 16 Stakeholder meeting

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⁹ http://www.caiso.com/2ba3/2ba39d31a0b0.html

- Oct 25 Stakeholder meeting
- Dec 15 ISO Board Meeting

This topic that comprised this work group represents a continuation of the effort begun last year to better integrate the generator interconnection procedures (GIP) and the transmission planning process (TPP). Until 2010 these two processes were essentially separate and parallel with little provision for coordination between the two beyond each one recognizing in its assumptions the transmission upgrades approved by the other. This did not present much of a problem in the context for which these processes were designed, where the GIP and TPP only needed to respond to relatively steady, predictable growth in load and incremental changes to the supply fleet. But then a few years ago California enacted ambitious environmental policy mandates that called for dramatic changes to the supply fleet within a decade, triggered a wave of commercial activity to build renewable resources, and quickly exposed the need to revise both the GIP and the TPP and to be able to accommodate these rapid changes.

Three important developments occurred during 2010 that recognized these new needs and made substantial progress towards integrating the GIP and TPP. First, the ISO conducted the Revised Transmission Planning Process initiative (RTPP), which culminated in FERC's December 16, 2010 order approving the ISO's filed RTPP proposal. The ISO's newly approved TPP features three new elements explicitly relevant to GIP-TPP integration.

- The new TPP created a "public policy-driven" category of transmission elements that enables the ISO to identify and approve additions and upgrades needed to meet state and federal policy requirements. This TPP innovation derived from the recognition that the driver of the majority of new transmission over the next decade would be California's mandate to meet 33 percent of its electricity demand from renewable resources by 2020 (the "33% RPS"), and that the traditional reliability and economic project categories would not provide a sufficient basis for planning needed upgrades. Notably, in its order on the RTPP FERC expressed the view that the policy-driven category could and should obviate the need for many GIP-driven upgrades.
- The new TPP provides explicit provisions to reevaluate significant network upgrades that
 are identified in GIP Phase 2 cluster studies and are not yet committed to in executed
 LGIAs, to determine whether enhanced or alternative transmission facilities could meet
 the needs of the interconnection customers more cost-effectively while addressing other
 grid needs at the same time.
- The new TPP clearly lays out the criteria for distinguishing the public policy-driven from the other categories of transmission additions and upgrades, places ISO planners in the central role of producing an annual comprehensive plan that addresses all categories of needs for the ISO balancing authority area (BAA), requires that the comprehensive plan go to the ISO Board for approval, and then conducts a competitive process for independents and incumbents to bid to build and own rate-based policy-driven and economic projects.

The second key development during 2010 was FERC's issuance of a notice of proposed rulemaking on transmission planning (NOPR), which addressed many of the same issues that the ISO's RTPP filing addressed. Among other things, the NOPR identified the need for transmission providers to develop a new public policy-driven category of transmission additions and upgrades in their planning processes, and described how this new category should enable transmission providers to develop transmission to meet the needs of renewable generation

projects more cost-effectively through their planning processes than by having network upgrades arise from their generator interconnection procedures.

The third key development was the ISO's 2010 GIP stakeholder initiative (now referred to as "GIP 1" since we are engaged in "GIP 2"). Among other important reforms to streamline the GIP, this initiative created a multi-year timeline with specific interface points between the GIP and the TPP. Specifically, the GIP 1 established an annual cycle for the next several rounds of cluster windows for submission of interconnection requests and the associated GIP Phase 1 and Phase 2 cluster studies, such that the Phase 2 cluster studies would feed into the TPP each year approximately in August, and the Comprehensive Transmission Plan would feed into the assumptions of the GIP cluster study process each year approximately in March. One result of the coordination of GIP and TPP timing developed in the GIP 1 is that it will support the further integration of the GIP and the TPP as described below.

The topics identified for Work Group 1 are closely interrelated aspects of improving the integration between the GIP and the TPP. The ISO offers the following objectives and requests that stakeholders comment on these and identify other objectives they believe should be added to this list.

- 1. Integrate the GIP and the TPP as far as possible so that decisions to approve new rate-based transmission rates can be based on a comprehensive planning approach that addresses all the needs of the transmission system holistically and thereby makes most cost-effective use of ratepayer funding.
- Rely more on the TPP and less on the GIP as the venue to identify and approve new rate-based transmission. FERC highlighted this objective in its transmission planning NOPR and its 2010 decisions on the ISO's RTPP filing and the Midwest ISO's transmission planning filing, specifically in the context of its discussion of the public policy-driven category of transmission projects.
- 3. Provide incentives through appropriate cost allocation for developers of new resources to select the most cost effective grid locations for interconnection.
- 4. Limit the potential exposure of transmission ratepayers to the costs of building transmission additions and upgrades that are under-utilized.
- 5. Provide greater certainty to developers of new generation resources that the network upgrades they need will be approved for siting by the CPUC and other siting authorities by utilizing the provisions of the ISO's new TPP to support the need for these upgrades. In this regard, one specific TPP component that appears to be highly relevant is the least regrets approach to identifying policy-driven upgrades based on finding the upgrades needed in multiple feasible resource scenarios.

Based on the last round of work group meetings and our review of stakeholder comments, the ISO has determined that these topics should be taken out of the GIP-2 scope and addressed in a separate initiative with its own timeline. This decision is based solely on the complexity of the topic, the multitude of sub-issues to be addressed, and the critical importance of developing a workable, sustainable process that meets the needs of all stakeholders and best serves the interests of ratepayers. In modifying the process and timeline for this initiative, ISO does not intend to diminish its priority or urgency. As such the ISO will shortly issue a revised schedule of stakeholder activities leading to the presentation of the ISO's proposal to its Board of Governors by December 2011 and filing at FERC shortly thereafter.

7.2. Work Group 2 - LGIP Queue and Study Process

7.2.1. PTO per-unit cost estimation and methodology for estimating costs of network upgrades and PTO interconnection facilities

In this stakeholder process, various generator stakeholders have reiterated opinions expressed in the 2010 GIP stakeholder effort that the per-unit cost estimates and cost-estimation methodologies provided by PTOs under the cluster process yield cost estimates that are too high and thus result in overstatement of costs. These parties have suggested that there should be further exploration of and transparency into cost estimation methodology for PTO cost estimation. These stakeholders have asked that the ISO conduct a stakeholder event to discuss cost estimation methodologies used by the PTOs.

During the 2010-11 annual per-unit cost stakeholder meeting and in the WG-2 teleconference meetings, a number of concerns were raised and requests made that merit further investigation and possible process revision pertaining to PTO cost estimation. The ISO will work with the PTOs to implement and incorporate refinements into the annual per-unit cost process, and document these refinements within the GIP BPM change management process. An outline of the anticipated changes and enhancements includes the following points:

- 1) All PTOs should use a common format for presenting per unit cost information so it is easier to do cross comparisons. The ISO and the PTOs will work together to develop a common per-unit cost template for presenting the annual per-unit cost information.
- 2) The PTOs should provide more explanation of various components of their per-unit cost process. Examples of this include:
 - a) Providing discussion of the reasons for higher and lower mitigation factors.
 - b) Providing more information on how the levels for contingencies are determined.
- 3) Common methodologies for cost factors. Various factors are used to increase the cost of upgrades due to external factors. One such instance is the use of mitigation factors based on classes of terrain where the transmission is to be built. The PTOs should agree to a common methodology on how these various factors are used in developing the cost of transmission upgrades to reduce confusion in comparing one PTO's costs to another's.
- 4) If in the process of developing estimates of the costs for upgrades for any specific generation project, a PTO has the ability to estimate transmission upgrade costs more accurately due to the existence of a similar transmission project that has recently been built (in other words, a comparable project), then the costs associated with the comparable projects may be used as a basis for that PTO estimation of costs for the specific project instead of using per-unit costs. A discussion of this option should be included in the PTO per-unit cost guide. Furthermore, when this option is used in a Phase II cost estimation process, the fact that this option has been used should be documented in the Phase II study results report along with any pertinent information regarding the comparable project whose costs were used.
- 5) The ISO will work with the PTOs to ensure that appropriate and consistent cost development philosophy and methodology are being used when using per unit costs that reflect the *anticipated* costs of upgrades that meets the intent of the Phase I requirement to establish the maximum cost responsibility for Network Upgrades.

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ISO final proposal:

The ISO proposes that it has enough information and agreement from stakeholders to work with the PTOs to make refinements to the annual per-unit cost process. The ISO has held one meeting with the PTOs on per-unit costs and the adjusted and non-adjusted dollar accounting approach in section 7.4.3 and anticipates holding several other meetings with the PTOs. The refinements will be open for further review by stakeholder within the GIP BPM process which is anticipated to be completed by the ISO during 2011.

7.2.2. Generators interconnecting to non-PTO facilities in the ISO BAA

This situation can occur where a generator is connecting to the transmission facilities of a non-PTO located inside the ISO BAA (e.g., a municipal utility), and the generator wishes to obtain full capacity deliverability status for the purpose of providing Resource Adequacy ("RA") capacity to an ISO LSE. Currently the GIP is structured for generators connecting directly to the ISO Controlled Grid. While currently only a small number of projects are interconnecting to non-PTO LSE systems (non-ISO controlled, sub-transmission), the ISO proposes that an ISO process should be put in place to allow the ISO to conduct studies for these projects and allow the interconnection customer to up-front fund the needed deliverability network upgrades on the ISO grid and receive full capacity deliverability status for purposes of providing RA capacity to the LSE within the ISO controlled grid.

In the GIP stakeholder process last year, the ISO included tariff language to authorize the ISO to conduct deliverability assessments for the PTOs WDAT interconnection customers who seek deliverability to the aggregate of load on the ISO Controlled Grid.¹⁰ The ISO proposes to create similar authority for the ISO to conduct deliverability studies, and for the customer to fund and have constructed the deliverability upgrades on the ISO-controlled grid, in the situation of a generator interconnecting to non-PTO facilities when that non-PTO entity is situated within the ISO BAA. Under the proposed approach, the generator would submit an application to the ISO (along with any required request to the non-PTO entity) to be studied for full capacity deliverability service only if that generator has met certain criteria.

ISO final proposed criteria:

1) The non-PTO LSE includes the ISO as a participant in the non-PTO entity's interconnection study process; the ISO would be considered to be an affected system. If the non-PTO interconnection process does not provide for the ISO to participate in a study process which, among other things, ensures that there is adequate transmission on the non-PTO's transmission system for the project to be deemed fully deliverable to the point of delivery to the ISO system, then the project would not qualify to be studied for full deliverability and to have deliverability network upgrades built under this proposal for full deliverability on the ISO system. The ISO will determine on a case by case basis what information is needed to determine whether the project has

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¹⁰ Section 8.3 of Appendix Y states "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."

- secured firm transmission on the non-PTO's system and it is at the ISO's sole discretion to determine if the requirement for full deliverability to the ISO point of deliverability has been met.
- 2) All new projects under this section would be required to submit a study request (versus an interconnection request) to the ISO, similar to an interconnection request, with the same deposit and Interconnection Financial Security posting requirements as an interconnection customer, during the queue cluster open window periods.
- 3) The ISO would study the project for deliverability network upgrades as part of the Phase I and Phase II cluster study process along with other projects and the project would be allocated costs for deliverability network upgrades in the same manner as other projects in the cluster study group the project is assigned to.

7.2.3. Triggers for Financial Security Posting Deadlines

The current GIP provides that the final Phase I study starts the 90-day clock for the IC to make the first financial posting, and the final Phase II report starts the 180-day clock for making the second posting. Because of issues recently raised during LGIP transition cluster processing regarding what constitutes a "final" study report, the ISO has explored with stakeholders whether to further clarify or modify the triggers that establish the financial security posting deadlines. When the ISO performed the first round of interconnection studies for the LGIP transition cluster, the ISO found that, in certain circumstances, it became necessary to revise the final study report. However, in the assessment of the ISO, not every report revision would trigger an extension of the posting deadline; rather only revisions which caused certain substantive effects would do so.

The current ISO criteria for when a revision to a final report extends the posting time is as follows:

If ISO or PTO execution of the Phase II study resulted in a report that includes errors or omissions, and the necessary updates to the report resulted in either:

- (1) The interconnection customer's estimated interconnection costs were increased (either network upgrades or Participating TO interconnection facilities); or
- (2) A delay to the in-service date of required network upgrades or interconnection facilities that results in an expected delay to the commercial operation date of the proposed generating facility.

Then the date of the final Phase II study report will be revised and the corresponding financial security posting date will be adjusted accordingly.

Any other changes to the final Phase II study report will not result in a change in the date of the report or the corresponding financial security posting date.

Currently the GIP does not provide a mechanism for interconnection customers to preview a *draft* study report before it is issued as final. When the cluster process was initially created, the

thinking was that the time period to complete the individual study reports was too tight to afford time for a draft and then a final report. However, in the GIP 2 process, a number of stakeholder comments included requests to review a draft report, to allow the customers opportunity to make comments on the report earlier than during the results meeting which follows issuance of the final report. The ISO notes that the time for completion of the study reports has been shortened in last years' GIP Amendment from the period originally provided, making the turnaround time for a report even tighter. However, the ISO recognizes that the preview option merits further investigation as a possible process revision. The current GIP timeline does not have room for inserting an additional step that adds time to the overall process.

ISO final proposal:

Following review of comments on the straw proposal and discussions of the working group the ISO revised its proposal to include the following adjustments to the GIP.

Phase I Posting

Current Process:

 IC posts 90 calendar days after publication of the final Phase I study report.

Proposed Process:

- 1. The ISO issues the final Phase I study report to the ICs in accordance with the current tariff requirements.
- 2. If the IC proposes any revisions to the report the IC shall provide written comments within ten business days of receipt of the report, but in no case less than five business days before the ISO scheduled results meeting.
- 3. ISO and PTO will address the IC comments to the report during the results meeting.
- 4. The IC may submit follow up comments within three business days after the results meeting.
- 5. ISO and PTO determine whether the final report needs to be amended. If the report needs to amended, an amended report will be issued 15 business days after the results meeting.

The security posting is due 90 calendar days after the (initial) final report was issued. See below discussion on limited extensions for financial security postings.

Phase II Posting

Current Process:

 IC posts 180 calendar days after publication of the final Phase II study report.

Proposed Process:

1. The ISO issues the final Phase II study report to the ICs in accordance with the current tariff requirements.

- 2. If the IC proposes any revisions to the report the IC shall provide written comments within ten business days of receipt of the report, but in no case less than five business days before the ISO scheduled results meeting.
- 3. ISO and PTO will address the IC comments to the report during the results meeting.
- 4. The IC may submit follow up comments within three business days after the results meeting.
- 5. ISO and PTO determine whether the final report needs to be amended. If the report needs to amended, an amended report will be issued 15 business days after the results meeting.
- 6. The security posting is due 180 calendar days after the initial final report was issued. See below discussion on limited extensions for financial security postings.

The ISO proposes to create a concept of "substantial error" to reflect errors which might trigger a revision of a report. Report errors which are not substantial errors would be reflected in correspondence or other writing external to the report, so as to avoid the need to rewrite a report for every error. The corrected information would be reflected in the interconnection agreement (such as corrected cost estimates which were not high enough to be considered a substantial error). The ISO proposes to capture the concept of substantial error and the process for report revisions in the tariff language along the lines of the following:

PROPOSED NEW TARIFF SECTION – Phase I and Phase II Final Report Revisions

[GIP Section 6.6.1] Conditions warranting a revised report; substantial error or omission: The ISO shall cause a revised report to be issued following the publication of a final Phase I or Phase II study report, only if it is discovered, following issuance of the report, that the report contains a substantial error or omission.

The revised final report date shall contain an initial final report date and a revised final report date. The issuance of a revised report, in and of itself, shall not trigger a postponement of the deadline for the interconnection customer to post the interconnection financial security pursuant to Section 9.

Substantial error or omission defined. A substantial error or omission shall mean any error or omission that, as compared to the initial interconnection study report

- (a) increases the interconnection customer's cost responsibility for either the network upgrades or Participating TO interconnection facilities (i) by more than 5% or (ii) \$1,000,000 dollars; whichever is greater, or
- (b) reduces the interconnection customer's cost responsibility for network upgrades or Participating TO's interconnection facilities by more than 20%, or

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(c) delays the schedule that the proposed generating facility can obtain commercial operation by more than one year.

No interconnection customer-initiated change to a Phase 1 or Phase II final study report (other than requesting correction of an error or omission that the ISO has determined constitutes a substantial error or omission that results in one or more of the limited conditions resulting in postponing the interconnection financial security deadline under the paragraph below) shall operate to delay the deadline for posting the interconnection financial security deadlines set forth in GIP Section 9.

However, the PTO and the ISO will use reasonable efforts to clarify any errors or omissions in a final report that do not constitute a substantial error or omission. When a report contains an error that does not rise to the level of substantial error, the corrective information shall be reflected in the generation interconnection agreement.

A dispute over the plan of service by an interconnection customer shall not be considered a substantial error or omission unless the interconnection customer can demonstrate that the plan of service was based on an invalid or erroneous study assumption that if corrected would meet the criteria above for a substantial error or omission.

An interconnection customer customer's disagreement as to whether a requested change constitutes a substantial error or omission shall not operate to postpone the deadline to post interconnection financial security. In case of such dispute, the interconnection customer shall post the amount of interconnection financial security determined by the application of GIP Section 9 to the final report, subject to refund in the event that the interconnection customer is the prevailing party following adjudication of such dispute.

[GIP Section 6.6.2] Limited conditions postponing interconnection financial security deadline; Issuance of a revised study report due to a substantial error or omission as defined earlier may postpone the deadline that the Interconnection Customer is required post financial security.

If a final study report is revised due to a substantial error or omission, then the deadline that the interconnection customer is required to post the next interconnection financial security shall be the later of:

- 1. For a Phase I report, 90 calendar days after issuance of the original final Phase I study report, or 40 calendar days after the issuance of the revised report.
- 2. For a Phase II report, 180 calendar days after issuance of the original final Phase II study report, or 60 calendar days after the issuance of the revised report.

If the substantial error or omission has resulted in a delay in the original financial security posting date, based on the date of the original final report, the ISO will notify the customer of the new posting amount and due date.

An interconnection customer customer's disagreement as to whether a substantial error or omission brings about any of the limited conditions above postponing the interconnection financial security deadline shall not operate to postpone the deadline to post interconnection financial security. In case of such dispute, the interconnection customer shall post the amount of interconnection financial security determined by the application of applicable deadline set forth in GIP Section 9 to the final report, subject to refund in the event that the interconnection customer is the prevailing party following adjudication of such dispute.

In conjunction with this proposal, the ISO also proposes to extend somewhat the time frame for parties to complete the negotiation and execution of the interconnection agreement. The current tariff states that the ISO, PTO and the IC have 90 calendar days after the final Phase II report is published to negotiate a Generation Interconnection Agreement (GIA). The ISO proposes that this be revised to provide another thirty days to complete the task. Accordingly, the ISO proposes changing the existing tariff language to state that "The ISO, PTO and the IC will exercise reasonable efforts to negotiate an interconnection agreement¹¹ within *120 calendar days* after the draft Phase II report is released to the IC.

New Item: proposal to correct a broken link to a cross-reference in the tariff - The ISO has recently negotiated a few LGIAs which have referenced outdated tariff sections on the disposition of forfeited funds. The following changes are being proposed to update the tariff;

• Replace reference in Tariff section 37.9.4 of 11.8.5.3(b) (does not exist in Tariff) to section 11.29.9.6.3

The background for this correction is as follows:

The pertinent GIP provisions that govern ISO disposition of "forfeited funds" resulting from interconnection customer withdrawal are as follows:

Handling of forfeited Study Deposit funds:

3.5.1.1 Use of Interconnection Study Deposit.

All non-refundable portions of the Interconnection Study Deposit that exceed the costs the ISO, Participating TOs, or third parties have incurred on the Interconnection Customers behalf shall be treated in accordance with *ISO Tariff Section 37.9.*

Handling of forfeited Interconnection Financial Security funds:

9.4.2.6 Notification to CAISO and Accounting by Applicable Participating TO(s). The applicable Participating TO(s) shall notify the ISO 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 ISO all proceeds not otherwise reimbursed to the Interconnection Customer or applied to costs incurred or irrevocably committed by the applicable Participating TO(s) on behalf of the Interconnection Customer in accordance with this LGIP Section 9.4. All non-refundable

¹¹ http://www.caiso.com/2b53/2b53950f1cf40.pdf Section 11.2 Negotiation

portions of the Interconnection Financial Security remitted to the CAISO in accordance with this LGIP Section 9.4 shall be treated in accordance with ISO Tariff Section 37.9.4.

These sections refer the reader to the ISO provisions for disposition of penalty funds, with is contained in another portion of the ISO tariff outside of the GIP:

37.9.4 Disposition of Proceeds

The CAISO shall collect penalties assessed pursuant to this Section 37.9 and deposit such amounts in an interest bearing trust account. *After the end of each calendar year, the ISO shall distribute the penalty amounts* together with interest earned through payments *to Scheduling Coordinators as provided herein*. For the purpose of this Section 37.9.4, "eligible Market Participants" shall be those Market Participants that were not assessed a financial penalty pursuant to this Section 37 during the calendar year.

Each Scheduling Coordinator that paid GMC during the calendar year will identify, in a manner to be specified by the ISO, the amount of GMC paid by each Market Participant for whom that Scheduling Coordinator provided service during that calendar year. The total amount assigned to all Market Participants served by that Scheduling Coordinator in such calendar year (including the Scheduling Coordinator itself for services provided on its own behalf), shall equal the total GMC paid by that Scheduling Coordinator.

The ISO will calculate the payment due each Scheduling Coordinator based on the lesser of the GMC actually paid by all eligible Market Participants represented by that Scheduling Coordinator, or the product of a) the amount in the trust account, including interest, and b) the ratio of the GMC paid by each Scheduling Coordinator for eligible Market Participants, to the total of such amounts paid by all Scheduling Coordinators. Each Scheduling Coordinator is responsible for distributing payments to the eligible Market Participants it represented in proportion to GMC collected from each eligible Market Participant.

Prior to allocating the penalty proceeds, the ISO will obtain FERC's approval of its determination of eligible Market Participants and their respective shares of the trust account proceeds. If the total amount in the trust account to be so allocated exceeds the total GMC obligation of all eligible Market Participants, then such excess shall be treated *in accordance with Section* 11.8.5.3(b).

This last cross-reference is no longer current. Section 11.8.5.3(b) was renumbered when the ISO tariff was revised in accordance with the new market design (formerly known as "MRTU"). Section 11.8.5(b) was renumbered and is now designated as Section 11.29.9.6.3.

7.2.4. Clarify definitions of start of construction and other transmission construction phases, and specify posting requirements at each milestone

Some customers have requested that the phrase "start of construction activities," which triggers the third posting of financial security, be more precisely defined and that the 100% posting requirement for start of construction be phased so that separate and discrete postings can be made for certain regularly-defined discrete components of the transmission upgrade construction process.

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Construction Activities is a defined term in the ISO Tariff, as stated below.

Actions by a Participating TO that result in irrevocable financial commitments for the purchase of major electrical equipment or land for Participating TO's Interconnection Facilities or Network Upgrades assigned to the Interconnection Customer that occur after receipt of all appropriate governmental approvals needed for the Participating TO's Interconnection Facilities or Network Upgrades.¹²

The interconnection network upgrades for a project can consist of multiple components and or multiple phases of a single large transmission project. The ISO understands the concerns an IC can have if the language is read to mean that *all* (100%) of the third posting becomes due when construction activities start for just one component of the required network upgrades. The circumstances could be such that other, large dollar components of the full upgrade build-out may not start until some later time. The ISO proposes to add the following paragraph to section 9.3.2 "Third Posting of Interconnection Financial Security" of Tariff Appendix Y. Based on stakeholder comments the ISO believes the additional language is all that is needed to, in essence, communicate to Interconnection Customers the ability to work this issue into the interconnection agreement process that is current tariff already allows.

If an Interconnection Customer's network upgrades are separated into two or more specific projects and/or can be separated into two or more separate and discrete project phases (discrete components) and the Participating TO is able to identify and separate the costs of the identified discrete components, then the Participating TO, the ISO and the Interconnection Customer may negotiate as part of the Generator Interconnection Agreement parsing the third posting for Interconnection Financial Security into smaller deposit amounts and discrete milestone dates for each discrete component related to the Network Upgrades and/or Interconnection Facilities described in the Generator Interconnection Agreement.

In addition, because the Participating TO will sometimes commence work early under a letter agreement (or in the form of an engineering and procurement agreement), with a security posting attached to this early work, some customers have asked for the ISO to set out a particular procedure to describe the interrelation between the letter agreement posting and the start of construction posting, with a pre-defined procedure for reducing the start of construction posting to prevent redundant posting for work secured under the letter agreement. The ISO will include this issue as part of the procedure and responsibility document developed under GIP-2 item 7.2.5.

The ISO proposes to do this during the GIP-2 process and include the appropriate solution as part of this item's revised draft final proposal.

7.2.5. Improve process for interconnection customers to be notified of their required amounts for IFS posting

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¹² California Independent System Operator Corporation, Fifth Replacement FERC Electric Tariff, Appendix A, Master Definition Supplement

Stakeholders have supported the ISO improving the process whereby an interconnection customer is notified when their interconnection financial posting amounts change due to changes in the study reports.

The ISO proposes to develop a procedure and responsibility document in coordination with the PTOs that delineates the process, timeline and responsibilities between the ISO and the PTOs so that past issues are not repeated. The ISO believes the GIP BPM change management process is the appropriate document and forum for documenting the procedure and responsibilities by which the ICs will receive notifications for their required posting amounts and commits to working with the PTOs to develop a procedure for inclusion into the GIP BPM.

The ISO will further develop these procedures in the BPM change management process and expects the new procedures will be completed by year end.

ISO final proposal:

Straw proposal comments and the discussion during the working group meeting on this topic indicate that stakeholders agree with this proposal. The ISO further proposes to include in the procedure and responsibility document the following items:

- Interconnection customers and a Participating TO will sometimes agree to commence
 work early under a letter agreement (or in the form of an engineering and procurement
 agreement), with a security posting attached to this early work. A procedure describing
 the interrelation between the letter agreement posting, the second IFS posting and the
 start of construction posting will be developed to prevent redundant posting for work
 secured under the letter agreement.
- 2. A procedure describing the process for interconnection IFS posting requirements when the network upgrades related to a single project or projects in a study group require network upgrades on more than one Participating TO's system.

7.2.6. Information provided by ISO (Internet Postings)

The ISO has not changed any aspect of this proposal since the draft final proposal was posted on May 27, 2010.

Some stakeholders have indicated that there should be more access to current and/or updated queue or base case information. These have included requests that ISO provide information such as additional data, and study availability. Currently, much of this information is kept in a secure area on the caiso.com web portal. Stakeholders have also asked for maps to be available which could provide locations favorable to development or substations where additional room exists to connect projects. The ISO and stakeholders need to weigh the sensitive nature of this information with the need for greater access.

The ISO is receptive to working with stakeholders to identify information the ISO can develop to post and maintain with a reasonable amount of effort and to develop a more user friendly webpage. The ISO will continue to seek input from stakeholders through the GIP 2 process in an effort to provide meaningful and up-to-date information that facilitates the interconnection process. External parties must understand, however, that the ISO is required by federal regulation to safeguard Critical Energy Infrastructure Information (CEII) from public dissemination. This is a primary reason why transmission information is placed behind the secured web portal, requiring parties who have a business reason to contact the ISO and execute an ISO and WECC non-disclosure agreement and access the information through password-protected web-gates assigned to specifically designated individuals.

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Another item in data availability is that under GIP Section 3.6 the ISO is required to post its interconnection study information on the ISO website. The ISO proposes that the ISO tariff be modified to clarify the language so that it clearly states what information the ISO is to consider confidential and to be posted to a protected ISO web site.

ISO revised draft final proposal:

Based on stakeholder comments received on the straw proposal a list of items and issues was developed (shown below). The ISO proposes to develop an internal team to further review the issues and requested items for posting to the internet and determine the capabilities of the ISO to develop and maintain these items and the requirements on the ISO that impact the level of security for posting the requested items. The ISO findings and recommendations will be made to stakeholders as part of the GIP BPM stakeholder process later this year.

- a. Increased transparency in the GIP process
- b. The ISO should post both the Phase I Interconnection Study and the Phase II Interconnection Study on its secured website.
- c. PTO/ISO/IC meeting minutes,
- d. Base Cases, contingency list, study criteria and findings.
- e. Maps
- f. Information that will allow the ICs to replicate ISO study results, including, but not limited to:
 - i. TPP Study Plans,
 - ii. contingency files,
 - iii. transmission upgrade alternatives studied,
 - iv. other data used in Reliability, Deliverability, and Short Circuit Duty studies

7.3. Work Group 3 - LGIP Non-Conforming Provisions, Grandfathered Resources and Site Exclusivity

7.3.1. Provisions for partial termination of an LGIA

The GIP anticipates that the interconnection customer will put into commercial operation the full MW capacity of its generating facility as specified at the time it entered the Phase 2 study process. The ISO pro forma LGIA includes a description of the generating facility, including the MW capacity. Under the LGIA the IC's obligations include, besides paying for the upgrades specified in the LGA, the completion of the generating facility as described in LGIA. In the case of a generating facility being constructed in phases, such that each phase may achieve commercial operation at a different time, the failure of the IC to construct one or more later phases of the project can lead to breach of the LGIA, with the potential for triggering a full termination of the LGIA, including termination of the interconnection and even disconnection of earlier phases of the generating facility that have achieved COD.

The partial termination provision was developed over 2010 to address a narrower circumstance in which the build out size of the generating facility is evaluated: the timing that it takes to complete the generating facility in comparison to the transmission needed to interconnect it. In this context, the focus is on the timing for governmental approval and licensing steps for construction of the transmission, in order to compare the transmission development path and time frame as against the analogous development path for the generating facility. In general,

setting aside the licensing and approval component, the actual construction time for renewable solar and wind generating facility can often be faster than the time to build the network upgrades. In the current regime, where governmental policy is striving to accelerate the timing for renewable generation development, there is the possibility of a gap between the times to complete the generating facility as compared to the transmission.

In certain customer LGIA negotiations during 2010, the situation arose where the time to complete the network upgrades was particularly long (some 84 months), and those customers indicated that there was business uncertainty at the time of LGIA execution as to whether the IC could build the later phases of the generating facility. It is important to note that these generating facilities were interconnecting as full capacity deliverability status projects and that the transmission upgrades which had a long lead time had been delivery network upgrades. Because of this uncertainty, the IC was reluctant to commit at LGIA execution to full build-out of the generating facility. In these situations, the customers asked that the ISO and PTO consider a contractual path to deal with the contingency that the later phases could not be built, so as to avoid the contractual uncertainty that would result if the parties simply took a "wait and see" approach to see if the contingency arose. For the customers, the contractual and litigation uncertainty of the future contingency would make it difficult to attract generation facility financing and equity investment. Accordingly, the partial termination provision allowed the IC to put monetary bounds around the uncertainty that it would not build the later project phases due to the 84 month time period to build the delivery network upgrades needed to enable each phase of the generating facility to achieve full capacity deliverability status.

In addressing these questions, the ISO worked with specific ICs and PTOs to develop non-conforming "partial termination" provisions whereby the IC could elect to include in the LGIA an option to terminate later phases of the generating facility. Upon exercise of the partial termination option the IC would pay a pre-specified "partial termination charge" ("PTC") that would be secured at LGIA execution or by a date certain specified in the LGIA. In this way, the IC could exercise partial termination of the LGIA with regard to later phases without terminating the entire LGIA and without adverse impacts on the earlier phases of the project.

The partial termination provision that was developed also permitted the ISO (in consultation with the PTO) to declare a partial termination and collect the PTC if the IC failed to meet milestones specified in the LGIA for development of its generating facility. The LGIA specified that, in the event of partial termination, the PTC would be applied for the benefit of ratepayers, as an offset to the PTO's transmission revenue requirement that is paid for out of the transmission access charge ("TAC"). The amount of the PTC was determined by the ISO based on an analysis of the risk of stranded investment, as indicated by the amount of new interconnected capacity needed to trigger the need for the associated network upgrades and the depth of the interconnection queue that would utilize the same upgrades if partial termination were exercised.

The scope of interconnection requests for which partial termination was previously included in LGIAs was limited to those transition cluster projects where the deliverability network upgrades were to be built over a period of approximately 84 months, and where the PTO had agreed to up-front fund the network upgrades. The partial termination non-conforming provisions were motivated also by the need to accommodate project milestones with regard to obtain ARRA funding. In view of the fact that more and more generation facilities are likely to utilize a phased structure in the coming years, this initiative proposes to incorporate partial termination provisions into the tariff and the pro forma LGIA, so that interconnection customers that meet the eligibility requirements may elect this option without having to utilize non-conforming LGIA provisions. The eligibility requirements are described below.

Stakeholder comments that the ISO could find an interconnection customer in breach of the LGIA for not building out the full output of the generating facility

During the stakeholder process, some stakeholders have expressed the opinion that, while the LGIA may specify the generating facility size, they find it surprising that the ISO has taken the position that the customer's failure to build all the MW of the generating facility could be considered a breach and default of the LGIA. These stakeholders have noted that lenders have expressed concern that, in FERC orders accepting non-conforming LGIAs with the partial termination provision, FERC "picked up" the ISO's stated position that a failure to build all the MW could result in termination of the LGIA and disconnection of earlier phases of a multiphased generating facility. Some stakeholders have expressed the opinion that they believe this position is too stringent in comparison to other LGIAs issued in other areas of the country.

While comparison to other jurisdictions is often instructive, the comparison must include the following critical component: in general, interconnection customers in such other jurisdictions pay for some or the entire network upgrades without repayment from the system ratepayers. And, where the ratepayers ultimately pay for network upgrades, the ratepayer obligation to fund the network upgrades is necessarily interrelated to the interconnection customer's contractual commitment to build the entire generating facility specified in the LGIA.

Moreover, the discussion of "how much MW capacity the generator must build" and the feature of providing additional IC flexibility must be informed by the fact that FERC's Order 2003 standardization of generation interconnection does not require repayment to interconnection customers of moneys they pay to fund the network upgrades that interconnect them. The proforma provision of the LGIA pertaining to repayment is only a mechanism for repayment when repayment is a feature of the interconnection process—its presence in the LGIA does not mean that FERC required generators to be reimbursed.

Stakeholder comments on submitting multiple interconnection requests

Another point raised during work group discussions was that partial termination provisions might not be needed if the ICs would be allowed to sign multiple LGIAs for each phase of the project. In general, the ISO responded that it has had a policy, of permitting only one LGIA per interconnection request, in large part because of the concern of potential gaming. Accordingly, the ISO responded that the customer could maximize its ability to optimize by putting multiple IRs in the queue for each component that the IC wants to pursue as a separate business model rather than combining them all into one IR and phasing the facility. Some stakeholders responded that, although they recognized that this option was available, the costs of multiple study deposits and multiple financial security postings made it cost prohibitive. 13

Stakeholder comments that including the partial termination provision provided too much risk to ratepayers by allowing too much flexibility to generators:

¹³ In evaluating this issue, the ISO is considering the merits of proposing for GIP 3 the option that the interconnection customer be permitted to downsize the MW capacity of the proposed generating facility after Phase II interconnection studies for any reason with the result that repayment for IC financing of network upgrades is adjusted. Under this scenario, the IC repayment for network upgrades might be based on a ratio where the numerator is the MW capacity of the facility that the IC ultimately builds and the denominator is the MW capacity of the MW capacity of the generating facility as it entered the Phase II interconnection study process.

A further discussion point was the concern that including the partial termination provision as a regularized feature of the GIP might result in the side effect of building more transmission than necessary. Since the scope of interconnection transmission build-out is dictated by the MW size of the generating facilities described in customer IRs, the corollary of this concern is that the availability of the partial termination provision might encourage ICs to "oversize" their projects when filing an IR because of added flexibility to reduce later, utilizing the partial termination provision. The ISO has attempted to meet this concern by (i) making the partial termination provision available only in the narrow circumstance where there is a multi-year lag of 3 years or more between expected COD date for the generating facility (phases) and the in service date for the transmission, and (ii) by the use of a scalable multiplier in determining the amount of the partial termination charge.

Stakeholder comments that circumstances for generators to use a partial termination options is too limited in the GIP proposal:

Energy policy has increasingly promoted the construction of renewable generation facilities. Unlike typical CT or combined cycle natural gas turbine facilities, renewable facilities, especially solar and wind facilities, are more modular in nature and allow much more scalability in construction. When viewed against past generation facilities typically sited in California, the nature of these renewable wind and solar facilities make it more feasible for the interconnection customer to modify its facility design during the course of project development -and better maximize "optionality" to suit construction, governmental licensing and commercial power transaction parameters that are part of the generator's development path. Stakeholders noted that interconnection customers have increasing need to modify size, configuration, and technologies at every stage of the interconnection request processing. Moreover, the ISO is cognizant of the fact that, by the time that the developer is reaching the LGIA stage, and committing financially in a contract to pay for specified upgrades, the interconnection customer's is in a better position to focus on minimizing its risk of open contingencies. One of these open contingencies is the ultimate size of the generating facility the risk that the generator might "overbuild" the facility to a size (and thus an output capacity) greater than the size that corresponds to the generating output that the generator reasonably expect to sell at COD. Another open contingency is licensing—especially, in a situation where the interconnection customer's generating facility licensing path is on a schedule where the conditions for permitting will not be known until after the customer has signed the LGIA.

Eligibility for Partial Termination provisions

The ISO revised final proposal continues to base the partial termination provisions and eligibility requirements on the two 2010 LGIA's that incorporated these provisions, both of which were conditionally approved by FERC.¹⁴ The ISO proposes that all of the following requirements be met for a project to be eligible to elect partial termination provisions.

- i. Generating facility design The IC's generating facility must be a phased generating facility, such that the discrete generation units that can be operated independently of each other.
- ii. Only projects seeking full capacity deliverability status are eligible;
- iii. Timing differences for in service date of transmission versus anticipated generating facility commercial operation ate The "time lag" between the estimated in service date

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 $^{^{14}}$ Palo Verde II, LLC at $\,$ 134 FERC \P 61,087and Palen Solar, II at 134 FERC \P 61,108

- for the entirety of the network upgrades and the COD for the second phase of the generating facility must be three years or more.
- iv. Project size The generating facility project size must be 200 MW or larger at the time the IC seeks to add the partial termination provision option to its LGIA.
- v. Amount of the generating facility that can be subject to Partial Termination the option to for partial termination can extend to no more than 50% of the MW capacity of the generating facility;
- vi. Multiplier (explained below) If the multiplier percentage is greater than 50% the project will not be eligible for Partial Termination.

Partial Termination Charge

Partial Termination provisions provide a benefit to an IC whose project meets the above criteria, by allowing the IC to terminate later phases of the project for payment of a pre-specified charge, without adverse impacts on the earlier phases of the project. At the same time, these provisions create a risk that ratepayers may pay for transmission upgrades that are under-utilized because they were sized for generation projects that were ultimately only partially completed. The proposed partial termination charge is intended to assess a reasonable cost to the IC upon exercise of partial termination that appropriately values both the risk to ratepayers regarding the potential for stranded costs and the benefit to the IC of the flexibility partial termination provides.

There are potentially two forms of stranded investment if the IC does not complete the full MW capacity of its interconnection request: first, that the PTO builds interconnection network upgrades which are too big for the project as ultimately sized, and that during the interim period between conclusion of the Phase II study report and the customer's completion of the generating facility (at a smaller MW size), the transmission planning process identified additional upgrades needed for later queued customers because it was "holding in reserve" the MW capacity that the IC ultimately did not build.

Consistent with the approach applied previously in the non-conforming LGIAs, the ISO proposes that, in the event of partial termination, the PTC would be applied for the benefit of ratepayers, as an offset to the PTO's transmission revenue requirement that is paid for out of the transmission access charge ("TAC"). The calculation of the amount of the PTC will be determined as described below to reflect the risk of stranded investment. This charge is based on the premise that partial termination could negatively impact ratepayers if it resulted in stranded investment, i.e., transmission capacity that ultimately was under-utilized due to a lack of significant projects later in the queue that could utilize the same transmission, or because later queued projects were required to build additional upgrades on top of the transmission capacity reserved by the phases that never come to be completed. Partial termination can also be invoked through mutual agreement by the PTO and ISO if the project sponsor fails to meet milestones specified in the LGIA.

The Multiplier

The multiplier---"X%"-- is calculated to reflect the ISO's evaluation of the risk of stranded investment, i.e., under-utilized transmission capacity, whose costs would be borne by transmission ratepayers. In the recent FERC-approved LGIAs incorporating non-conforming Partial Termination provisions, a 10 percent multiplier in the place of X% was arrived at based on the ISO's assessment that the risk of stranded investment for these generating projects was relatively small, due to the low MW threshold of new generation capacity needed to trigger the

upgrades, and the relatively high MW volume of additional generation in the queue that would utilize the same network upgrades if an interconnection customer exercised partial termination.

The multiplier reflects the risk of stranded investment by factoring in the MW amount of projects seeking to use the same transmission and the threshold MW amount of new generation capacity needed to trigger the associated network upgrades.

The ISO is mindful of rate payers being exposed to increased risk of stranded cost (i.e. because the termination provision will cause the generating facilitates they are built to construct to fall away) when the multiplier exceeds 50%. In this case, either the triggering MWs are too high or the amount of generation in the queue which could utilize the upgrades is too low. To address this condition the ISO proposes to exclude projects from eligibility for partial termination in cases where the multiplier percentage exceeds 50%.

Other stakeholder comment noted that the denominator of the multiplier ratio could be unrealistically high given the large MW volume of projects in the queue, resulting in a multiplier value that underestimates the risk to ratepayers. To mitigate this concern the ISO will only count generation in current and next study groups in calculating the denominator of the multiplier. For example, because Clusters 1 and 2 are combined for the phase 2 study, and Clusters 3 and 4 are likewise combined, when the ISO calculates the denominator of the multiplier for a project in Cluster 2, it will include projects in Clusters 1-4 in the same study area, but not projects in Cluster 5 or beyond. In the future, when a project in Cluster 4 wishes to include the partial termination provisions in its LGIA, the ISO will calculate the denominator of the multiplier considering projects in Clusters 3-5 in the same study area, but not Cluster 6 or beyond. As the ISO will be posting Phase II results for the initial cluster group being studied and will also be in the Phase 1 study process for the subsequent cluster group about the same time (18 months after the initial cluster study window), these two groups would be far enough along in the study process to merit consideration as being committed. Under the previous proposal, the ISO would have counted projects in the current cluster group plus any of the subsequent clusters that had been submitted.

Lastly, some stakeholders were concerned that the ISO not allow too much of the original generating facility to be terminated by partial termination. To mitigate this concern, the ISO will reduce the eligibility to 50% of plant size. Interconnection customers with special conditions that may warrant a higher percentage always have the option through a non-conforming GIA to request a higher percentage.

Calculation of the Partial Termination Charge

In general, the Partial Termination Charge represents an "option payment" paid by the IC to permit it to "partially terminate" the LGIA, meaning that it may terminate the LGIA with respect to certain phases of the entire generating facility which have been designated in the LGIA as eligible for partial termination and for which the IC has tendered the partial termination charge.

The partial termination charge is calculated as to the product of X% of the IC's cost responsibility for its network upgrades, as determined by the GIP Phase 2 cluster study, multiplied by the ratio of the megawatt capacity of the terminated portion of the facility to the megawatt capacity of the entire facility.

X% of the IC's cost		MW capacity of the terminated
responsibility for its network	Multiplied by	portion of the facility
upgrades, as determined by	Multiplied by	MW capacity of the entire
the GIP Phase 2 cluster study		generating facility

The multiplier---"X%"-- is calculated to reflect the ISO's evaluation of the risk of stranded investment, i.e., under-utilized transmission capacity, whose costs would be borne by transmission ratepayers. In the recent FERC-approved LGIAs incorporating non-conforming Partial Termination provisions, a 10 percent multiplier in the place of X% was arrived at. based on the ISO's assessment that the risk of stranded investment for these generating projects was relatively small, due to the low MW threshold of new generation capacity needed to trigger the upgrades, and the relatively high MW volume of additional generation in the queue that would utilize the same network upgrades if an interconnection customer exercised partial termination.

The ISO will examine the pool of other IRs in the current queue cluster (that is the cluster in which the IC is situated) and next subsequent cluster to calculate the denominator in the formula in Table 1 below. This formula works well for projects beginning in the Cluster 5 window next March. In order to properly count the projects currently being studied, the ISO proposes the following:

 For projects seeking partial termination in the current cluster study cycle (Clusters 1-2), the ISO will count projects who could utilize the network upgrades in Clusters 1-4 that have posted their second posting of interconnection financial security

In this revised final proposal, the ISO proposes to utilize the same type of assessment to determine the multiplier to use in future applications of the Partial Termination provisions. That is, the ISO will estimate the risk of stranded investment by calculating two quantities: (1) the number of MW triggering the network upgrades, and (2) the amount of generation in the queue which would utilize the same transmission upgrades. The proposed multiplier will have a floor of 10% and a ceiling of 50%, with intermediate values defined as the ratio of the two quantities just mentioned. This approach is captured by the following formula:

Table 1

- T = MW capacity of generation needed to trigger the network upgrades
- C = MW capacity of generation in the current and next subsequent cluster study groups that would utilize the same upgrades
- R (ratio) = T/C
- X = 0.1 for R <= 0.1
- X = R for 0.1 < R <= 0.5
- X = 0.5 for R > 0.5

Example:

Triggering	Generation in the	
MW	queue	Multiplier
50	600	10.0%
100	550	18.2%
150	600	25.0%
300	900	33.3%
		57.3 %
		Not
400	700	Available

In the discussion and comments following the ISO's straw proposal, some stakeholders asked the ISO to provide more detail on how the two key quantities above (T and C) would be calculated, but did not disagree with the above formula or the 10% minimum and 50% maximum percentages used as a floor and cap. To determine the triggering MW (quantity T), the ISO performs a deliverability assessment for each study group within the cluster, and for all generation in the study group that requests full capacity deliverability status. For this assessment, a power system base case is created that includes all transmission additions and upgrades that have been approved for interconnection customers in the serial queue or prior clusters or through the transmission planning process, and assumes that all full capacity generators in the serial queue or prior clusters are commercially operable. Under these conditions, the ISO tests for deliverability of the full capacity resources in the current cluster study group, and finds either that the base transmission network is sufficient or it is not. If it is not, then the ISO will identify network upgrades needed to make current cluster study group fully deliverable and, in the course of this assessment, will also determine what MW portion of the study group would be deliverable without the most expensive network upgrade. This last quantity, plus one, would be the triggering MW for this upgrade.

To determine the amount of generation later in the queue that would utilize the same transmission (quantity C in the formula), the ISO considers the current and next subsequent cluster study group.

Interrelation of Partial Termination and LGIA Termination Costs

Some stakeholders asked the ISO to clarify that the IC's election of partial termination and payment of the termination charge would relieve the interconnection customer from further cost responsibility associated with the network upgrades designated by the Participating TO and associated with the terminated phases of the generation project. In response, the ISO has added the following points:

- Upon the IC's exercise of partial termination under the LGIA, , the
 interconnection customer shall not be responsible for payment to the ISO or the
 Participating TO for any further costs, charges or expenses attributable to the
 Network Upgrades associated with the terminated phases of the generating
 facility.
- If the interconnection agreement is terminated in its entirety prior to any event of Partial Termination, then the Partial Termination Charge security which was provided to the ISO prior to the Partial Termination shall be returned to the interconnection customer. In the event of termination of the entire LGIA, the IC

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shall be subject to termination costs, and potential disconnection of generating units that have already received COD, because, in such event there would be no interconnection agreement between the PTO, ISO and IC for such units.

 To the extent that the costs of the Participating TOs network upgrades have received abandoned plant approval, the interconnection customers shall not be responsible for the termination costs for the network upgrades the Participating TO have agreed to upfront finance.

Additionally, when the IC has elected partial termination, then, upon receipt of the termination notice from the interconnection customer, the ISO and the Participating TO will determine the total cost responsibility of the interconnection customer with the following concepts:

- To the extent that the PTO still holds a financial security attributable to the phases of the generating facility that have been partially terminated, the IC shall be entitled to a refund of such security.
- The interconnection customer will remain responsible for all costs related to the network upgrades attributable to the phases of the generating facility that have not been partially terminated.

Partial Termination Triggers

The ISO proposes the same conditions as in the straw proposal under which a project sponsor, ISO or PTO can exercise the Partial Termination provisions under the following guidelines:

- I. Partial termination may be exercised at the sole discretion of the project sponsor any time after it posts the required PTC security
- II. Partial termination may also be exercised mutually by the ISO and PTO if the transmission customer misses project milestones as set forth in the LGIA.

7.3.2. Reduction in project size for permitting or other extenuating circumstances

The ISO has not changed any aspect of this proposal since the draft final proposal was posted on May 27, 2010. With the addition of the 5% safe harbor and additional clarity for instances where the ISO would accept a larger reduction, projects now have greater flexibility than before.

During work group discussions and in comments filed, stakeholders¹⁵ explained the need for flexibility to downsize the size of a project as specified in the LGIA due to land, permitting and other issues, without triggering a breach of the LGIA as a consequence. In these discussion and comments, the stakeholders generally emphasized issues beyond the control of the IC rather than business or financial factors. The ISO has considered such "beyond the control of the IC" issues to generally relate to considerations of substantial performance versus full performance of the contract, and agrees that it is important to address this matter as a distinct and separate provision from the partial termination provisions discussed in the previous section, where the total project would be structured under the LGIA to be completed in phases.

¹⁵ First Solar, CalWEA, LSA & Recurrent Energy

Consideration of the substantial performance issue requires a careful balance between creating incentives for an IC to size a project correctly against the realities which project developers face with unexpected permitting obstacles. The ISO is also mindful that ratepayer-funded transmission is built for the full capacity of the project, and therefore there would be some risk of ratepayer exposure to stranded investment costs if the project is allowed to downsize after the LGIA is executed. It is normally expected that between Phase 1 and Phase 2 any issues with land or air permits that could affect project size would become known. However, this is not always the case, and in the past the ISO has worked with projects sponsors on a case by case basis to evaluate the circumstances and make recommendations regarding modification of the project size.

The ISO proposes the following:

For project reductions below the 5% safe harbor:

The ISO and PTO would permit project modifications reducing the MW size of the generating facility for any reason that may occur between the execution date of the LGIA and the COD of the project, without triggering a breach of the LGIA. The greatest permissible project reduction would be 5% of the project size. The IC may modify the project size subject to the following conditions:

- Downsizing will not reduce the IC's network upgrade funding obligation and will not accelerate the repayment of such funding to the IC
- All other requirements imbedded in the LGIA with respect to posting amounts, timing of posting security, cost structure, etc., will not change as a result of the size reduction.

For project reductions above the 5% safe harbor:

The ISO and PTO would permit project modifications above 5% due to environmental or other permitting restrictions not foreseen at the time of LGIA execution and that cannot be mitigated by the IC through reasonable economic means and will be reviewed by the ISO on a case by case basis

- Downsizing will not reduce the IC's network upgrade funding obligation and will not accelerate the repayment of such funding to the IC
- All other requirements imbedded in the LGIA with respect to posting amounts, timing of posting security, cost structure, etc., will not change as a result of the size reduction.

7.3.3. Repayment of IC funding for network upgrades associated with a phased generation facility

The GIP currently provides that the project-sponsor for a phased generating facility is not entitled to repayment for IC-funded network upgrades until the "entire generating facility"

achieves commercial operation date.¹⁶ This tariff principle means that, should the interconnection customer fail to construct all phases, it shall never be entitled to such repayment.

From the outset of the GIP stakeholder process, there has been consensus among the ISO, PTOs and all other stakeholders that, when it comes to phased generating facilities:

- The sponsor's should not be absolutely disqualified to receive any repayment when the last phase was not built (did not achieve COD) for reasons that are not a breach of the LGIA; and that,
- The timing for repayment should be adjusted so that it is possible to begin repayment sooner than COD of that last phase.

In GIP work group meetings, discussion has centered on whether repayment should be tied solely to the commercial operation date of each phase of the generating facility, or whether such repayment must also be related to the in-service date of the transmission network upgrades necessary for each phase of the plant to reach its requested deliverability status. This subject was discussed again in the latest round of work group meetings conducted during the week of June 13th.

The ISO supports the rule that repayment should be related to the in-service date of the transmission network upgrades necessary for each phase of the plant *to reach its requested deliverability status*. The ISO proposes that the standard 5-year repayment cycle for the transmission network begin when:

- The IC tenders notice under the LGIA that a phase of the generation project has achieved commercial operation; and,
- The network upgrades necessary for the generation project phase to meet its level of requested derivability are in service.

The following additional criteria apply to repayment for a phased generating facility:

- 1. In order to be eligible for partial repayment upon commercial operation of a phase of the phased generating facility,
 - a) The generating project itself must be capable of construction in phases (generating units or modules);
 - b) The IC must have structured the project as a phased generating facility in the LGIA; and
 - c) The completed phase must correspond to one of the phases specified in the LGIA. For example, if a 1000 MW generating facility was divided into four 250 MW phases, the IC must complete and achieve commercial operation of the 250 MW electric generating unit 1 in order to qualify for

¹⁶ Section 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 prepayment for the Interconnection Customer's contribution to the costs of Network Upgrades.... (emphasis added)

- repayment for the first portion of its network upgrade costs, all of the 250 MW of electric generating unit 2 in order to qualify for repayment of the second portion of the upgrade costs, etc.
- d) The network upgrades necessary for the phase of the generation facility to meet its desired level of deliverability must be in service.
- 2. The partial payment amount will be equal to the percentage of the total generation plant that is declared commercial multiplied by the cost of the in service network upgrades. For example, if the assigned cost of the network upgrade is \$10 million dollars, and the percentage of the generation plant that reaches commercial operation is 25% of the total plant requested capacity, the interconnection customer would be able to start receiving payment of \$2.5 million dollars after the network upgrade is in service.
- 3. The IC must have posted the 100% financial security covering all the network upgrades, must carry out its contractual commitments to pay for the entire network upgrades specified in the LGIA, and must carry out its contractual commitment to complete the later phases of the generating facility in accordance with the LGIA. In this regard, if the IC completes one phase and repayments begin but then the IC later breaches the LGIA, the PTO and ISO shall be entitled to offset against repayments for network upgrades related to phase one any losses or damages resulting from the LGIA breach.
- 4. If the LGIA included a partial termination provision and partial termination was exercised, then the eligibility for repayment is not diminished because the phase that was partially terminated was not built.
- 5. In a case were the ISO has permitted the IC to reduce the MW size of its generating facility under the proposed substantial performance provisions (see section 6.3.2 above), the IC's right to repayment shall not be diminished because the substantial performance which the ISO accepted resulted in commercial operation of less than all the MW specified in the LGIA.
- All parties to the LGIA must be in agreement that each phase requesting commercial operation status meets the obligations sets forth in the LGIA and any other operating, metering or interconnection requirements to deliver the stated MW in the LGIA.

7.3.4. Clarify site exclusivity requirements for projects on federal land

The ISO has not changed any aspect of this proposal since the draft final proposal was posted on May 27, 2010.

Interconnection customers for the cluster process must establish site exclusivity or pay a site exclusivity deposit (refundable upon a showing of site exclusivity) and customers seeking to use the independent study track must show site exclusivity at the outset. Site exclusivity is defined in the ISO Tariff Appendix A, and contains requirements for establishing site exclusivity on private land and public land. The requirement for public land involves a final non-appealable

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permit, license or other right to use the property for purpose of generating electric power.¹⁷ In early 2009, the ISO issued a technical bulletin describing the business practice under which the ISO would deem an interconnection customer to have demonstrated site exclusivity under the "other right to use the property" component of the definition when the interconnection customer intended to site the generating facility on public land administered by the Bureau of Land Management (BLM), prior to having received a final, non-appealable permit.¹⁸

As indicated in the ISO's straw proposal document, the ISO does not propose to present the detail points of a revised ISO site exclusivity evaluation to the ISO Board of Governors Rather, the ISO proposes that this detail will be contained in the GIP.

7.3.5. CPUC Renewable Auction Mechanism requirement for projects to be in an interconnection queue to qualify

This issue will not be resolved by the August Board meeting and will continue on its own track. The ISO will notify stakeholders when it is ready to address stakeholder questions and implementation details.

Some stakeholders have said that they wish to participate in the CPUC Renewable Auction Mechanism ("RAM") process as bidders, and that they understand that RAM includes a proposed or established requirement that prior to submitting a bid in RAM, the generator must show that it has an active interconnection request in an interconnection queue (with the ISO or a utility, as appropriate). Some stakeholders asked about using the Independent Study Process, which allows for the submittal of an interconnection request at any time during the year, to meet this RAM requirement. The CPUC asked how deliverability is treated for distributed generation resources. The ISO will work with the CPUC and potentially other stakeholders to determine the most appropriate method for working out these issues. However, the ISO believes it is preferable for the CPUC and the ISO to work together with interested stakeholders to develop criteria for the RAM program that meets the needs of the RAM without requiring a unique solution in the ISO GIP, if possible. The ISO has been in communication with the CPUC and the PTOs who have submitted advice letters to determine the best approach to make the first RAM auction successful.

Documentation reasonably demonstrating:

¹⁷ The full definition for **Site Exclusivity is:**

⁽¹⁾ For private land:

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

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

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

¹⁸ The technical bulletin, issued February 9, 2009 can be accessed at http://www.caiso.com/1f42/1f42c00d28c30.html.

7.3.6. Interconnection Refinements to Accommodate QF conversions,
Repowering, Deliverability at the Distribution Level and other Special
Circumstances Associated with Smaller Projects, Including Potential
Modifications to the Independent Study Process and Fast Track Processes

Interconnection processes and procedures must be periodically reviewed to ensure continued conformity with market trends, as evidenced by the prior discussion regarding the CPUC's RAM program. The serial study approach envisioned by Order No. 2003 anticipated relatively infrequent requests for interconnection by large central station thermal generating facilities. The proliferation of interconnection requests triggered largely by RPS requirements forced proactive changes to the Order No. 2003 model that were incorporated in the ISO's original interconnection reform efforts. That original reform process properly focused on increasing the efficiency of interconnecting viable large renewable projects located remotely from load centers in commercially competitive renewable energy zones. However, generation development remains highly dynamic and various factors, including financial market conditions, evolving environmental policy, and simply lessons learned, have led to a greater emphasis on diverse project opportunities, including qualifying facility conversions, repowering, and smaller less transmission dependent distributed supply.

Accordingly, stakeholders have requested review of ISO interconnection processes and procedures to assess potential improvements to accommodate these developing market opportunities (in addition to the RAM program discussed above). Currently, the ISO Tariff contemplates the following options:

- 1. Determination whether interconnection procedures are applicable (Tariff § 25):
 - a. If new "Greenfield" capacity of any quantity, then interconnection procedures apply.
 - If an existing generating facility and no new incremental capacity are requested, but the proposed changes may lead to a potential violation of Applicable Reliability Criteria, then interconnection procedures apply.
 - c. If existing generating facility and no new capacity and changes do not implicate Applicable Reliability Criteria, then interconnection procedures do not apply.
 - d. QF commercial conversion, see Path 2 below
- 2. Once interconnection procedures apply:
 - a. Fast Track: limited to new resources 5MW and under that request energy-only deliverability status. These projects can enter the queue at any time and the study process is anticipated to last approximately 120 days.
 - b. Independent Study Process (ISP): applies to new or existing projects of any size that are electrically independent of cluster study projects and request energy-only deliverability status. These projects can enter the queue at any time and the study process is anticipated to last from 210 to 240 days. The interconnection customer must currently show the COD is achievable through permitting and/or commitments for the energy supply. The interconnection customer is required to post \$50,000 in security plus \$1,000 per MW for study results.

c. Queue Cluster: all projects that do not meet the foregoing.

Stakeholders have raised concerns whether this existing structure sufficiently facilitates incremental expansion or reconfiguration of previously studied and planned resources or existing operational resources (whether former QFs or not). Thus, this part of the ISO proposal attempts to clarify interconnection requirements for re-powered or reconfigured generation facilities, including resolution of concerns regarding the maintenance and potentially increase of a resource's deliverability. The interrelated areas addressed in response to stakeholder input include:

- Reviewing the ISP and Fast-Track procedures;
- Clarifying interconnection procedures applicable to QF conversions, facility repowerings, and other minor facility modifications:
- Assessing the feasibility of allowing increased behind-the-meter flexibility; and
- Clarifying the process needed, if any, for determining the "deliverability" of facilities interconnected at the distribution level.

However, any potential changes must be clearly linked to a well defined objective and benefits to one group of interconnection customers must be carefully weighed against the impacts to other interconnection customers and the overall efficiency of the ISO's interconnection process.

Applying these factors, the ISO proposes the following modifications or clarifications to the existing "paths" available to project developer.

Path 1: Interconnection Procedures Do Not Apply

The ISO proposes to retain the basic structure of Section 25 of the ISO Tariff. Any project, whether QF or not, will not be subject to interconnection procedures if the changes to the generating facility do not represent any increase in nameplate capacity and will not cause a potential violation of Applicable Reliability Criteria. The ISO intends to work with its PTOs and project developers to better define what potential changes may represent a potential reliability concern. The results of this discussion in addition to the applicable procedures, including form of submission of information to perform the assessment, timing of the assessment, etc., will be incorporated into an ISO business process manual. A change to the ISO Tariff will be required to obtain authority for the ISO and/or PTO to charge for its services associated with the review process. Currently, the ISO contemplates that the potential charge would be similar to that imposed under the Fast Track.

As discussed in Path 2, if an existing QF is making changes that do not implicate the interconnection process and its commercial status is also not being altered, then no requirement for a Generation Interconnection Agreement should be required. The QF's existing arrangement with the host utility should remain in force. Nor should there be any need to protect or modify the QF's deliverability status.

Path 2: QF Commercial Conversion Only

For existing generators that from QF to PGA status without repowering or reconfiguring their facility, the existing affidavit approach will be used. Similar to Path 1, the process for performing this review would be set forth in a business practice manual. In addition, the converting QF

would be required to enter into a Generator Interconnection Agreement, which may, if necessary, set forth upgrades necessary to ensure compliance with PGA requirements for metering, telemetry and other instrumentation.

Path 3: Fast Track

The 5 MW limit for the Fast Track was extensively discussed in earlier initiatives and identified as a reasonable limit to ensure such projects will not cause reliability concerns. Fast Track eligibility applied only to new resources. Stakeholders have asked that the Fast Track process be expanded to encompass repowering of existing generation facilities and that the 5 MW limit apply to incremental expansions, not the gross capacity of the generating facility. ¹⁹

In response to stakeholder suggestions, the ISO proposes to allow the Fast Track process to apply to repowering or reconfigurations of existing generation facilities with gross capacity less than 5 MW if the repowering or reconfiguration does not qualify for Path 1. The ISO further proposes to allow any existing resource and repowering or reconfiguration facility qualifying for Path 1 to incrementally increase its gross capacity by 5 MW. This constitutes a change from the prior version of the proposal, which limited the availability of the Fast Track to resources with gross capacity of 5 MW or less. However, the same screens, criteria and application procedures currently governing only *new* generation facilities would apply to this new category under the Fast Track additional MWs. For example, a 50 MW resource could apply to increase its gross capacity to 55 MW by proposing an incremental 5 MW, a 100MW repowering facility, if deemed as not causing a potential violation of Applicable Reliability Criteria under Path 1, could apply to increase its gross capacity to 105 MW by proposing an incremental 5 MW. It should be noted that even where proposed incremental capacity does not satisfy the existing Fast Track screens and no upgrades are reasonably anticipated, the ISO and PTOs may nevertheless determine that the incremental capacity may be interconnected in a manner consistent with safety and reliability. (See, ISO Tariff, Appendix Y, Sec. 5.3.3) Where the proposed screens are satisfied, the ISO anticipates that upgrades, if any, are likely to be reasonably minor such that the customer options meeting provided under section 5.4 of the GIP will provide the means for the ISO and PTOs to protect the safety and reliability of the system regardless of the gross capacity of the resource. (See, ISO Tariff, Appendix Y, Sec. 5.3.4)

Path 4: Independent Study Process

As a general matter, the ISO concludes that the current ISP rules represent an appropriate mechanism to ensure an equitable allocation and efficient identification of upgrade costs necessary for reliability by isolating those projects that have a limited potential to impact electrically-related projects. During the stakeholder discussions, it became clear that projects must satisfy the short-circuit duty screen of the ISP to preclude the potential interdependence between one project and others that may be in the queue. As such, the idea of fundamentally relaxing or creating a new "path" for incremental expansion has been deferred at this time. Nevertheless, the ISO believes that the "behind-the-meter" proposal provides an alternative method for projects to satisfy the flow-based prong of the ISP test.

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¹⁹ NextERA

A project developer can avail itself of the ISP where it can provide certain indicia of commercial viability as well as pass the flow test and the short-circuit duty test. A project developer proposing to increase capacity would likely first attempt to satisfy the ISP screens because such capacity could then be added to its Pmax for market purposes. However, if the barrier to applying the ISP is the impact on neighboring projects or elements as determined by the power flow analysis in GIP Section 4, then the project developer should be able to abide by preestablished operational limitations that eliminate those impacts. The stakeholder behind-themeter proposal provides an appropriate template for these restrictions.

In particular, under this revised application of the behind-the-meter proposal, the ISO offers that the following technical and business criteria continue to be pertinent:

Technical Criteria

- The total nameplate capacity of the expanded generation plant shall not exceed in the aggregate 25% of its previously studied capacity or up to 100MW.
- The behind the meter capacity expansion can only take place after the project COD and after all network upgrades for the project are in-service.
- The plant shall have its expanded capacity under a separate breaker called the "expansion breaker" at all times. Alternatively and with ISO/PTO consent, the plant operator may decide whether the generation modules that will be tied to the expansion breaker can be a mixture of GIAC facilities and the expansion facilities (total capacity behind the expansion breaker to remain equal to or lesser than the planned behind the meter capacity expansion figure).
- Unless specifically requested by the ISO, the total output of the generator shall not exceed its originally studied capacity at any time. The ISO shall have the authority to trip the expansion breaker if the plant exceeds that amount.
- The Interconnection Customer agrees that the Net Qualifying Capacity for the modified facility will be limited to the level assumed in the prior Deliverability Assessment regardless of the actual performance during peak hours after the modified facility is in commercial operation. The Interconnection Customer may submit a request pursuant to requirements in section 8.2 of Appendix Y²⁰ to determine whether the Net Qualifying Capacity could be increased.

Business Criteria

- The interconnection status (full-capacity or energy-only) of the capacity expansion must be the same as the interconnection status of the formally studied project.
- The GIA shall be amended to reflect the revised operational features of the capacity expansion.
- The IC can at any time request that ISO formally study the expanded capacity in the GIP study process and to formally add that capacity to its GIAC so that the expanded capacity can be released from the operational restrictions after the GIP studies are completed and the IC has complied with all the relevant requirements.

The original intent of the foregoing stakeholder proposal was to allow generating units to expand capacity behind the ISO revenue meter so long as their output would not exceed the capacity

²⁰ http://www.caiso.com/2b53/2b53950f1cf40.pdf, section 8.2

level that was formally studied and agreed to in the Generation Interconnection Agreement in order to avoid going through the standard generation interconnection study process. The ISO agrees that capacity expansion should be encouraged to facilitate the ability to the generator to operate at higher capacity factors and improve the utilization of its interconnection facilities and the overall transmission grid. This objective must be balanced against reliability. The ISO believes it has achieved the appropriate balance by expanding the proposed use of the ISP process and thereby provides project developers with greater timing flexibility and some relief from the more substantial financial requirements associated with the standard queue cluster.

Path 5: Queue Cluster

All new or repowered or reconfigured generators that seek Full Capacity Deliverability Status or do not otherwise satisfy the requirements for the foregoing paths would be subject to the general queue cluster provisions of the ISO's generator interconnection procedures.

Other Deliverability Issues:

Maintaining Deliverability upon QF Conversion

Stakeholders have requested clarification of how deliverability will be treated in certain QF scenarios. The ISO has a general policy of maintaining deliverability of existing generation resources and allowing generation owners to retain deliverability (on a MW to MW basis) when repowering or otherwise replacing generation delivering to the same location. Consistent with this approach, existing QF resources have been studied at their maximum historic output and have been demonstrated to be deliverable. This allows their Net Qualifying Capacity to be equivalent to their Qualifying Capacity under CPUC resource adequacy counting rules. The question then becomes whether a QF's deliverability should be adjusted if its repowers through an interconnection path that requires energy only status, i.e., Fast Track or ISP, or upon conversion to PGA, and, if so, how?

Under either scenario, the QF will not be allowed to increase its Net Qualifying Capacity in a manner inconsistent with ISO deliverability and reliability study methodologies. Thus, the Net Qualifying Capacity could increase up to the studied amount to the extent the Qualifying Capacity is equal to or greater than the capacity assumed in ISO study methodologies.

Under the scenario of a conversion of a thermal QF to commercial status, the CPUC's counting rules would generally change from historic output to nameplate. However, the QF is still likely to be restricted by the commercial needs of its underlying industrial host. Again, to the extent the QF had an existing Net Qualifying Capacity value, then that value would continue to be honored where consistent with the capacity assumed in the ISO's deliverability analysis. In the thermal QF example, the historic Qualifying Capacity should always be less than nameplate. Only if the ISO studied the resource at nameplate, therefore, would the Net Qualifying Capacity be allowed to increase. As such, actual delivered amount will form the basis of the Net Qualifying Capacity of a QF converting to commercial status.

Distribution Level Deliverability

Deliverability for resource adequacy purposes reflects the ability of the energy output of the capacity to reach the aggregate of load during periods of peak demand. The ISO has two categories ICs can elect for interconnection service, Full Capacity Deliverability Status ("FC") and Energy Only ("EO"). To receive deliverability for RA purposes the resource would need to select FC as its interconnection study option. The ISO does not have a means under the tariff

to grant deliverability (FC status) to any resource, regardless of size or whether the resource connects to the distribution or transmission system, unless a deliverability study is undertaken. For projects in the Wholesale Distribution Access Tariff under the direction of SCE, SDGE & PG&E, those seeking deliverability would be included in the ISO's deliverability study. Thus, in order to qualify for Resource Adequacy capacity, under current ISO tariff processes the resource must select FC in the interconnection process.

As an initial matter, the issue of deliverability only becomes relevant after the CPUC or local regulatory authority determines the eligibility of resources to qualify as resource adequacy supply. Assuming such resources do count for RA supply, the ISO has been working with distribution utilities to coordinate their wholesale distribution tariffs with the ISO's deliverability assessments. In general, the ISO contemplates incorporating distribution level project information provided by distribution utilities into its deliverability modeling and analyses performed as part of the standard interconnection cluster process.

7.4. Work Group 4 - LGIP/LGIA Interconnection Cost and Security Requirements

7.4.1. Modify the second and third financial security posting requirements to offset for PTO funded network upgrades (incorporating the ISO's LGIP 2010 tariff waiver into the GIP)

Throughout this initiative process, stakeholders have supported the proposal to make the ISO's 2010 financial posting waiver for the transition cluster a permanent feature of the GIP. The provisions of the waiver "back out" the cost of network upgrades that a PTO has committed to up-front fund from the interconnection customer's network upgrade financial security posting requirements. Current GIP provisions do not make any distinction in the financial security requirements between cases where the PTO has committed to fund network upgrades and those in which the interconnection customer funds their construction.

Moreover, the ISO's experience under the cluster process is that the PTO's commitment to fund network upgrades has typically been dependent upon a FERC award to the PTO of abandoned plant cost recovery. This means that, in the interconnection agreement, the PTO's contractual commitment to fund does not arise until after FERC issues an abandoned plant award. Historically the PTO has made a separate filing to FERC to seek abandoned plant cost recovery (i.e. separate from a filing that asks FERC to approve the interconnection agreement) for each discrete transmission project to which the interconnection customer's network upgrades relate, and FERC has considered and decided the matter on a case-by-case basis. This filing has sometimes been referred to as an "incentives" filing, because the PTO asks FERC for various incentives (such as an adder to its return on equity, approval of construction work in progress) together with the request for abandoned plant approval. To date, a PTO has not conditioned its up front funding offer on FERC award of other incentives besides the abandoned plant recovery award.

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²¹ In this context, this is a determination that, should construction of the up-front funded network components be abandoned during the course of construction, the Participating TO could apply to FERC for recovery of the prudently incurred costs.

A timing issue has sometimes arisen when the timing of the abandoned plant award from FERC and the time to post the interconnection second financial security ("IFS") posting has not been aligned. In many case to date, the PTO has filed its incentive filing on or after the execution of the LGIA, and so FERC has not decided on the incentives filing request by the time when that the second IFS posting comes dues. Accordingly, there is a question of whether the IC's second IFS posting must include amounts to cover the network upgrades that the PTO has conditionally committed to fund when the condition is still unfulfilled at posting time. In implementing the 2010 waiver granted for the transition cluster, the IC was not required to post this amount during the pendency of the abandoned plant issue at FERC.

In working group discussions on the ISO's Straw Proposal document, the consensus of stakeholders was that the straw proposal provisions for this subject should be carried forward to the draft final proposal, and no party objected to any of the provisions.

After release of the draft final proposal, stakeholder CalWEA commented that

CalWEA supports the Proposal. However, consistent with the discussion at the June 3rd meeting, the ISO should clarify that the amount of the Initial IFS Posting would be reduced to reflect any lower costs in the Phase II Study results below the Phase I costs used to set that posting.

The comment prompts this further explanation regarding up front funding—in general, once a PTO commits to fund network upgrades, the corresponding security posting amount is an "overcollection" to be returned to the interconnection customer. In the transition cluster experience, however, in many cases the generators and participating transmission owner desired to advance the timing of the network work to a time prior to the time when the participating transmission owner's commitment to up front fund would commence (typically, before the LGIA was executed and/or before an award of abandoned plant cost recovery approval by FERC). In such cases, although the first security posting was technically refundable to the interconnection customer, the customer and the participating transmission owner were entering into an engineering and procurement agreement (E&P agreement, often referred to by the parties by the term "letter agreement"), and so they decided that, instead of refunding the security to the customer, the security posting would be retained and serve as the security for the E&P agreement.

Absent such an arrangement to hold the security for work advanced under an E&P agreement the funds are refundable to the customer to the extent they are "overage" because the funding commitment has shifted. In the event that the customer and participating transmission owner agree that these funds shall not be returned but applied to an E&P agreement, then whether the security should be subsequently reduced after a Phase II interconnection study report to "true up" to any lower network upgrades cost estimations set forth in the Phase II study report is a matter for negotiation between the customer and participating to. Since the terms of the security are from that point governed by contractual agreement between the parties rather than ISO tariff requirement, the ISO does not believe it is appropriate for the tariff to speak to the topic. (In this regard, the option for an E&P agreement is provided for in GIP Section 10 as an optional mechanism which the IC may request and which the PTO must offer on a pay as you go basis. Section 10 does not mandate that the customer provide security to securitize its

²² Order No. 679, FERC Stats. & Regs. ¶ 31,222 at P 163

obligation to pay costs incurred under the letter agreement. In practice, however, participating transmission owners have required such security.)²³

ISO Proposal for the PTO Up-Front Fund-Partial IFS Waiver

This second iteration of the draft final proposal carries forward, essentially unchanged, the ISO proposal component from the draft final document. The ISO proposes to incorporate the terms of its June 30, 2010 waiver request to FERC into the GIP. This document will refer to the provision as the "PTO Up-Front Fund-Partial IFS Waiver" provision.

Following that model, the ISO proposes that an IC will be relieved of the obligation to post the second and third financial security postings for network upgrades that the Participating TO has unequivocally committed to up-front fund and under the terms discussed below.

- The ISO will not enter into the decision by the PTO on whether to elect to fund up-front fund network upgrades.²⁴
- IC relief from the obligation to post for the PTO up-front funded network upgrades shall be effective for only so as long as the PTO's up-front funding commitment is effective. Accordingly, if the funding commitment ceases, the posting requirement immediately "springs up" and the IC must post.

The PTO Up-Front Fund-Partial IFS Waiver" provision will include the following provisions:

 The offset to the posting requirements for PTO up front funded network upgrades will only apply to the second and third financial postings. It does not apply to the interconnection customer's obligation to make the initial posting.

In this regard, the initial posting requirement is still an important requirement to identify those projects in the queue that are viable and mature enough to continue on in the interconnection cluster and to

²³ On a related note, some interconnection customers have asked that the ISO create a detailed process to outline how financial security postings should be reduced when the underlying network upgrade construction work and costs for which they serve as security have been reduced by the work performed pursuant to a letter agreement. This subject area is not new to cluster processing. In order to perform the task, it would be necessary to survey the custom and practice that has developed as interconnection network upgrades have been built –that, is to survey the history of LGIA contract performance. The ISO understands that these LGIA performance detail issues may take on increasing importance as dollar costs to build interconnection network upgrades become a larger percentage of overall project costs in a renewable generation development era. However, the ISO believes that such areas of detail development must await future tariff and BPM stakeholder efforts, given the number and complexity of front-line issues.

²⁴ It is important to distinguish the situation where a PTO voluntarily elects to up front finance network upgrades from a situation where PTO construction of network upgrades are an outcome of ISO's transmission planning process. In this stakeholder process, SCE has now referred to four situations where it characterizes the results as requiring the PTO to "involuntarily" fund the network upgrades. SCE ties two of these situations to the interconnection tariff:

¹⁾ where a customer drops from the queue and the PTO must cover the cost responsibility for the customer's network upgrades when the PTO builds the network upgrades for the remainder of the cluster group;

²⁾ where the actual cost of network upgrade construction exceeds the customers "cost cap" (maximum cost responsibility)

separate out those projects which are not ready to move forward. The ISO is of the opinion that, at his early stage, the increasing generator commitment of the ISO's interconnection process is still of primary importance. The ISO also believes that the requirement to post the initial posting will dovetail with Participating TO funding decisions, because, at stage one, the generation projects will not be mature enough for a PTO to commit unequivocally to extend up-front funding to specific projects. In general, the ISO expects such commitment to manifest itself in the SGIA or LGIA,

- 2. In situations where the second posting requirement arises before the interconnection agreement is finalized, the IC will be provided a 30 calendar day extension to post the IFS portion related PTO-up front funded upgrades, as long as the IC continued to engage in good faith efforts to complete the LGIA negotiation during the additional 30 day period. If the interconnection agreement is not finalized during this further 30-day period, the IC shall be required to post the remaining amount, subject to refund.
- 3. The IFS posting waiver extends only to those network upgrade components that the Participating TO agrees to up-front fund. If there are any remaining network upgrades, then the IC is required to post financial security for these components.
- 4. If after execution of the LGIA/SGIA, a PTO up-front funding commitment that is conditioned on a FERC grant of abandoned plant approval is pending before FERC, then the posting for network upgrades related to the PTO up front funding commitment will be waived during the pendency of the matter until determination by FERC.
 - a) Should the FERC deny a grant of abandon plant approval --the IC will be required to post the security within 45 days of FERC's issuance of the order (not the time that the order becomes final).
 - The IC and PTO and ISO may determine to renegotiate the interconnection agreement to provide for alternative timeframes or methods for funding the posting, but if no such agreement is executed within the 45-day period, the IC would be required to make the posting.
 - A negotiated interconnection agreement shall be deemed to be conforming if it:
 - extends the time period to post to a date no later than 75 days from FERC's initial order denying abandoned plant approval; or
 - provides for continued Participating TO up-front funding of the network upgrades.
- 5. In order for the PTO up-front funding commitment to trigger a waiver of IC posting requirements for the related network upgrades, the up-front funding commitment must be conditional upon the IC meeting a standardized set of milestones for IC development and construction of the

- generating facility (which shall set forth in pro-forma LGIA or SGIA agreements—as part of a PTO-voluntary up front funding option).
- 6. Should the IC commit a breach of the LGIA/SGIA resulting in default of the interconnection agreement, miss a milestone, or should some other condition arise which permits the PTO to withdraw its contractual commitment to up-front fund, then, within thirty (30) days of the PTO's notice to the IC that the PTO is withdrawing its up-front funding commitment, the IC will be required to post financial security covering the related network upgrades.

7.4.2. Revise LGIA insurance requirements

The current pro forma LGIA contains obligations for all three contract parties (the IC, the PTO and the ISO) to provide evidence of insurance. In this regard, the pro forma does not recognize that the ISO's role under the LGIA is different from the other two parties, who will undertake specific construction work as part of their performance under the contract.

In the Straw Proposal, the ISO staff recommended changing the LGIA insurance requirements to remove the ISO from the requirement to procure insurance and add others as additional insurers to its policies, and to require PTO tender of insurance information only when requested by the IC. In addition, the proposed changes also change the timing requirement for IC insurance requirements related to construction activities.

In the workgroup discussions a further comment was made that insurance policies referenced in Article 18.3.5 (Commercial General Liability, Business Automobile Insurance and Excess Public liability policies may not be commercially available with provisions wherein insurers waive all rights in subrogation.

Subrogation generally refers to a situation where an insurance company tries to recoup expenses for a claim it paid out when the loss was incurred by the act of another party who is legally responsible for paying the insured (damaged party) for the claim. A right of subrogation allows the insurance company to step into the shoes of its insured (the damaged party) to pursue an action directly against the responsible party.

In the prior iteration of the draft final proposal, the ISO carried forward the proposed revisions that it offered in the workgroups (contained in a handout document), with one addition: in response to the comment that "waiver of subrogation provisions" may not be commercially available, the ISO has included additional language to LGIA Article 18.3.5 stating that "If any Party can reasonably demonstrate that coverage policies containing provisions for insurer waiver of subrogation rights or advance written notice are not commercially available, then the Parties shall meet and confer and mutually determine to i) establish replacement or equivalent terms in lieu of subrogation or notice or ii) waive the requirements that coverage(s) include such subrogation provision or require advance written notice from such insurers

ISO Proposal

In this revised draft final proposal, the ISO includes one additional revision, in response to a further comment by stakeholder Wellhead Electric. In this regard, Wellhead Electric offers the experience that it has not been able to procure employer's liability coverage the current-LGIA specified level of "statutory benefits"; it notes that insurer lines of employers liability coverage

usually carry a \$1 million limit. In response to this comment, the ISO has revised the LGIA article 18.3.1 to adjust the required insurance coverage amount for this insurance component to \$1,000.000.²⁵

The revised draft final proposal LGIA insurance provisions are listed below, with strike out text to show deletions and underlines to show additions from the pro forma LGIA:

- **18.3 Insurance.** Each-As indicated below the designated Party shall, at its own expense, maintain in force throughout the periods noted in 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 any insurance required to be carried by the CAISO, the State of California:
 - 18.3.1 Employer's Liability and Workers' Compensation Insurance The Participating TO and the Interconnection Customer shall maintain such coverage from the commencement of any commencement of Construction Activities providing statutory benefits for workers compensation coverage and coverage amounts of no less than \$1,000,000 for employer's liability 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. The Participating TO shall provide the Interconnection Customer with evidence of such insurance within thirty (30) days of any request by the Interconnection Customer. The Interconnection Customer shall provide evidence of such insurance (30) days prior to entry by any employee or contractor or other person acting on the Interconnection Customer's behalf onto any construction site to perform any work related to the Interconnection Facilities or Generating Facility, which shall list the Participating TO as an additional insured.
 - 18.3.2 Commercial General Liability Insurance The Participating TO and the Interconnection Customer shall maintain general commercial liability insurance commencing within thirty (30) days of the effective date of this LGIA, 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. If the activities of the Interconnection Customer are being conducted through the actions of an Affiliate, then the Interconnection Customer may satisfy the insurance requirements of this sub-

Workers' Compensation Insurance provides payments to employees who suffer a work-related injury or occupational illness. This coverage is referred to as Part One, according to which the insurance company agrees to pay all compensation to an injured worker. Medical care, temporary disability benefits, permanent disability benefits, vocational rehabilitation services, and death benefits make five types of Workers' Compensation benefits.

Employers' Liability Insurance insures against claims due to employment-related injuries or illnesses which can come, not only from the employee, but from the employee's family members, relatives and third parties. The Employers' Liability portion is usually offered under Part Two and provides additional coverage included in Workers' Compensation policies.

²⁵ In general, there are two types of basic workers' compensation coverage:

- section 18.3.2 by providing evidence of insurance coverage carried by such Affiliate and showing the Participating TO as an Additional Insured, together with the Interconnection Customer's written representation to the Participating TO and the CAISO that the insured Affiliate is conducting all of the necessary pre-construction work. Within thirty (30) days prior to the entry of any person on behalf of the Interconnection Customer onto any construction site to perform work related to the Interconnection Facilities or Generating Facility, the Interconnection Customer shall replace any evidence of Affiliate Insurance with evidence of such insurance carried by the Interconnection Customer, naming the Participating TO as additional insured.
- 18.3.3 Business Automobile Liability Insurance Prior to the entry of any such vehicles on any construction site in connection with work done by or on behalf of the Interconnection Customer, the Interconnection Customer shall provide evidence of 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. Upon the request of the Participating TO, the Interconnection Customer shall name the Participating TO as an additional insured on any such policies.
- 18.3.4 Excess Public Liability Insurance Commencing at the time of entry of any person on its behalf upon any construction site for the Network Upgrades, Interconnection Facilities, or Generating Facility, the Participating TO and the Interconnection Customer shall maintain 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. Such insurance carried by the Participating TO shall name the Interconnection Customer as an additional insured, and such insurance carried by the Interconnection Customer shall name the Participating TO as an additional insured.
- 18.3.5 The Commercial General Liability Insurance, Business Automobile Insurance and Excess Public Liability Insurance policies shall name the other Parties identified in the subsections above, 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. If any Party can reasonably demonstrate that coverage policies containing provisions for insurer waiver of subrogation rights, or advance written notice are not commercially available, then the Parties shall meet and confer and mutually determine to i) establish replacement or equivalent terms in lieu of subrogation or notice or ii) waive the requirements that coverage(s) include such subrogation provision or require advance written notice from such insurers.
- 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.

7.4.3. Standardize use of adjusted vs. non-adjusted dollars in Interconnection Study Reports and LGIAs

Currently there is no standard practice for the use of adjusted (constant) or non-adjusted (nominal) dollar amounts to specify interconnection and network upgrade costs in LGIAs. The ISO believes that it is important to adopt a uniform approach for all Interconnection Study Reports and LGIAs. For some projects, the interconnection facilities may take many years to build, and thus calculating security based on costs at the time of construction may provide a better indicator of security posting amounts. Currently, the cost method is stated in the interconnection study reports and interconnection agreements for (LGIAs and SGIAs) and is used as a basis for interconnection postings of financial security.

As explained in the work group discussions, the ISO conducted some informal review of the methods used by the PTOs, with the idea of developing a common practice to be used under the ISO GIP tariff. The ISO understands that per unit cost values for PG&E and SDG&E contain adjustments for inflation in future years when the facilities are to be constructed, but that the SCE values do not. The ISO understands that this has led to situations where interconnection customers connecting to SCE's system may not have been apprised of the higher time-adjusted cost figures for network upgrades and PTO interconnection facilities until such numbers were placed into a draft LGIA for the customer's review. Work group discussions also confirmed that the PTOs utilize additional "escalation factors" besides inflation.

ISO Proposal

The ISO carries forward this revised draft final proposal, the ISO proposes that PTO cost estimates set out in future Phase I and Phase II interconnection study reports be set out both in current year dollars and in time-adjusted dollars. The particulars of this approach and format will be developed in meetings associated with the BPM change management process.

As the ISO has explained in the work group discussions, the ISO proposes that PTOs utilize a uniform set of the "escalation factors" for time-adjusted dollar calculations are utilized and uniform across the PTOs. The ISO proposes to conduct additional meetings with PTO personnel to discuss PTO current practices and to arrive at a common set of escalation factors. It is likely that the detail as to escalation factors and dollar adjustments will be incorporated through the BPM change management process for the GIP or separately posted on the ISO website rather than placed in full detail within the GIP.

7.4.4. Clarify the Interconnection Customer's financial responsibility cap and maximum cost responsibility

There is some confusion on the part of some stakeholders regarding now the customer's maximum cost responsibility for network upgrades is derived. Some parties believe that the "lower of Phase I or Phase 2" rule relates only to the second posting requirement and not the maximum cost responsibility. This would mean that while the customer may post 30% of the costs in the Phase 2 study when these cost numbers are lower than Phase I, the customer still

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has an ultimate cost responsibility up to the higher costs numbers that were in Phase I and might ultimately have to pay the difference up to that cost level.

As explained throughout this stakeholder process, it is the ISO's position that an interconnection customer's maximum cost responsibility under GIP is the lower of the Phase I or Phase II interconnection study cost estimates. The ISO believes that any apparent confusion stems from reading Section 6.7 of the GIP in isolation without considering other provisions relating to costs and responsibility (such as Section 7.1, which outlines the scope of Phase II studies).

ISO proposal

In this revised draft final proposal, the ISO proposes to provide clarifying language in GIP Sections 6.7, 7.1 and Section 9, to make it unambiguous that the IC's maximum costs responsibility is the lower of the Phase I or Phase II interconnection study cost estimates.

7.4.5. Consider adding a "posting cap" to financial security postings for the PTO's Interconnection Facilities

Customers post security for both Network Upgrades and the PTO's Interconnection Facilities. For example, at the first posting, the Network Upgrade component is based on the lower of three screens: 15% of the estimate; \$20,000 per MW that is the subject of the interconnection request; or \$7.5 million. In this way there is a "cap" so the customer will never have to post for than \$7.5 for the first posting. In contrast, the first interconnection financial security deposit amount for PTO's Interconnection Facilities is 20% of the Phase I cost estimate.

In workgroup discussions and comments, some stakeholders have suggested that the GIP be modified to include similar provisions for "not to exceed" cap be included within for the PTO's Interconnection Facilities. In these discussions, some customers noted that the Phase I interconnection study work is a "desktop" exercise which does not consider individualized information for each interconnection customer, such as the customer's ownership of land or rights of way that might result in a savings in constructing their interconnection facilities as compared to a standard method of service. The PTOs acknowledged such facts but noted that the Phase I study time constraints and volume of interconnection customers in a queue cluster do not permit for more particularized studies. In addition, the PTO's indicated, and some generator stakeholder's acknowledged that high PTO Interconnection Facility prices operate as a "price signal" to indicate that the interconnection customer's chosen point of interconnection may be suboptimal or otherwise an "outlier." In addition, some stakeholders stated that a call for a decrease in capital outlay for security deposits for PTO's Interconnection Facilities might contribute to the undesirable result of prolonging the presence of non-viable projects in the queue.

At the straw proposal stage, the ISO did not have a proposal to alter the financial posting amounts for the PTO's Interconnection Facilities.

In the draft t final proposal, the ISO proposed to modify the financial security posting requirements for PTO's Interconnection Facilities to mirror the posting amounts required for Network Upgrades.²⁶

²⁶ The ISO was persuaded by the point that the Phase I interconnection study determinations of for the PTO's Interconnection Facilities are not individualized for the circumstances of the interconnection customer. While this is understandable due to time constraints in completing the Phase I study results, it may result in artificially high

The ISO believes that the need to engage in sometimes protracted discussions about each such issue may be diminished if the dollar level of the second posting for the PTO's Interconnection Facilities is lowered, and that this adjustment may take some of these detail negotiation points out of the LGIA negotiation.

In response to this addition in the draft final proposal, CalWEA and LSA included comments asking for further detail refinement to define what constitutes a PTO's Interconnection Facility for purposes of financial postings. While the ISO appreciates the desire by IC stakeholders to drill down into interconnection configuration specifics in order to get the best cost estimates possible for Phase II study reports, the ISO does not believe that further efforts in this area can be accomplished within the timeframe for completion of this GIP 2 stakeholder effort.

ISO Proposal

This revised draft final proposal carries forward the ISO proposal s to modify the financial security posting requirements for PTO's Interconnection Facilities to mirror the posting amounts required for Network Upgrades.

7.4.6. Consider using generating project viability assessment in lieu of financial security postings

As comments to this stakeholder initiative, stakeholders First Solar, Brightsource Energy, and Large Solar Association ("LSA") submitted written comments suggesting that the GIP incorporate an opportunity for interconnection customers to make a demonstration of execution of a power purchase agreement, project licensing progress and/or capital expenditures in project development (such as financial securities posted with the buyer of a PPA) as a "discounting factor" posting amounts or an alternative to the requirement to make a first and/or second financial security posting. In subsequent work group discussions, stakeholder enXco also voiced support for such an addition to the GIP. After the work group meetings, the ISO also received a further written proposal from enXco. These stakeholders point to the "increasing generator commitment" policy of the advanced financial security postings and indicate that this alternative approach would provide interconnection customers an opportunity to demonstrate development viability without having to provide the additional capital outlay of the second financial security posting.

In May work group discussions parties discussed and acknowledged that the inclusion of such demonstrations and need for evaluations would add to the resource demands of the GIP process. In counterpoint, Parties also concurred that there was near consensus that the queue is now over-subscribed, illustrated by the fact that Queue Cluster 4 applications number nearly 200, and propose to add some 35,000 in generation additions to the ISO-controlled grid. In this regard, some parties suggested that reducing current financial security postings might not be the correct signal.

Not all IC stakeholders are in favor of reducing the "increased generator commitment" of the GIP any further. In this regard, stakeholder NextEra stated that it "strongly opposes this idea." NextEra commented that "the ISO"s initiative to raise the financial security posting amounts and

estimations for this facilities at the Phase I study phase. In addition, generator stakeholders indicated several issues which have arisen in Phase II interactions between customers, and the PTOs regarding the specifics of their configurations. One such recurring fact pattern relates to possible IC construction of redundant telecommunications lines when special protection schemes (SPSs) are necessary.

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move to a cluster study process have been some of the biggest and most important improvements serving to screen viable projects in the past few years" and that "the challenge in clearing out the serial cluster projects is in part due to the serial nature of the study process, but also attributable to the fact that there is no financial incentive to leave the process if the project is not moving forward." NextEra further commented that "with regard to the idea that a viability assessment should be a substitute for interconnection security, NextEra would highlight that project viability is a consideration in the utilities' procurement process. One of the key factors of project viability in the utility assessment is the generator progress in the ISO's interconnection process. In other words, the utilities, and the CPUC in the Renewable Auction Mechanism, are looking to the ISO's process to screen many of the less viable projects. To substitute what has been a successful ISO means to screen projects through security thresholds with another qualitative assessment would not improve the process."

ISO Proposal

Again, in this revised draft final proposal, ISO proposes not to include the option for interconnection customers to demonstrate alternative evidence of project viability in lieu of the current financial security postings. It is the opinion of the ISO that the subject matter is better addressed in a later GIP stakeholder initiative, where more thorough evaluation can be made to such questions as possible consequences on queue volume, identifying the proper indicia of viability in lieu of financial postings (or which operate as a discount factor); and how interconnection customers might package a demonstration of project viability so as to avoid or minimize the application of GIP resources in evaluating such materials.

It is likely that development of in this area may need to be detailed. For example, in the ISO's experience with the transition cluster, many interconnection customers are developing generation facilities in phases, under a business model which is somewhat in flux as the customer pursues multiple options for completion. Including the execution of a PPA as a substitution or reduction factor for a posting might be complicated by the fact that a PPA might not cover all phases or MW capacity of the facility, may include within the contract off-ramps for various contingencies (such as not to exceed cost estimates for the interconnection, licensing, or other development components). In processing the transition cluster, the ISO has found it necessary to complete LGIAs for many interconnection requests to engage in deeper evaluation of generating project specifics, the developer's plan for development and financing issues than the ISO believes FERC anticipated under the standardized LGIP process paradigm. Moreover the intake and evaluation of this project information may be challenging when queue clusters comprise 200 or more interconnection customers.

7.4.7. Consider limiting interconnection agreement suspension rights

On April 12, before the ISO issued the straw proposal, SCE submitted stakeholder comments which included a proposal to eliminate or limit the interconnection customer's ability to suspend construction under the pro forma LGIA. SCE indicated that the underlying concern was that, if a customer exercised the suspension provision for network upgrades commonly needed for a group of customers in the queue cluster, that the PTO would be effectively forced to continue construction of those upgrades under a circumstance where the construction costs might not be approved by FERC.

The pertinent provision, contained in LGIA Article 5.16 of the pro forma LGIA, states:

5.16 Suspension. The Interconnection Customer reserves the right, upon written notice to the Participating TO and the ISO, 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 . . . (emphasis added). ²⁷

In work group discussion, parties have commented that the fact that the IC cannot suspend work for network upgrades "common to multiple generating facilities" should avoid a situation where the IC causes suspension that forces the PTO to continue the network upgrade construction at its own cost. In the work group 4 work group discussions in June, SCE explained that its concern was that the phrase "common to multiple generating facilities" might be read too narrowly, and that the narrow reading might consider the phrase to apply only to common network upgrade as viewed against the rest of the IC's in the customer's queue cluster, as opposed to viewing the common use across all LGIP interconnection customers, including those IC's in later gueues for whom the upgrades have been built into the base case of network upgrades. ISO counsel expressed the opinion that the LGIA language in Article 5.16 does not contain such a restriction and that the plain meaning and logical application of the provision to the situation should mean that, if a customer sought to exercise suspension, the customer's right to suspend would be viewed against all ICs, not just the ones in the same queue cluster as the IC who seeks to suspend construction under its LGIA. This interpretation means, effectively, that, in a cluster LGIP environment, the customer may not ever be able to suspend the construction of network upgrades.

Upon further review since last stakeholder meeting, the ISO acknowledges that there could be a circumstance where an IC would seek to exercise LGIA suspension rights with regard to network upgrades that

- were not identified in that customer's Phase II Interconnection Study as common to multiple Generating Facilities but,
- have been incorporated into a Phase II interconnection study by the time the customer wishes to exercise suspension.

The resulting issues to be resolved are:

- What is the scope of the IC's suspension right as to upgrades that are common to these later-queued generating facilities; and
- Whether the ICs exercise of suspension might require the Participating TO to continue construction during at IC's suspension period.

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The pro-forma LGIA used under the GIP process can be accessed on the ISO website at http://www.caiso.com/2b18/2b1877f6493a0.pdf.

The ISO acknowledges that, if the IC is allowed to suspend (and ultimately terminate) but the IC's upgrades have necessarily been incorporated into a later base case, and are rendered uncertain due to the customer suspension and cannot be "backed out" of those later base cases, there could be circumstance where the PTO is required to go forward with work that might be abandoned—conceptually this work would take place during the time period between suspension and resumption of work or termination of the LGIA. It is logical to conclude that--as long as the expenses associated with the work were prudently incurred when viewed from the time-perspective when the uncertainty was a live event-- the PTO should be entitled to recover for the costs even though the transmission asset was later abandoned. This conclusion also assumes that costs were not covered by the suspending customer's payments to the PTO under the LGIA (if the IC continued on to complete the interconnection) or the suspending customer's financial security (if the customer withdrew).

ISO Proposal

The ISO proposes to add a new section the LGIP to provide context around the IC's right of suspension in the cluster LGIP environment. In this regard, the ISO proposes to include an LGIP provision stating that, in determination of whether network upgrades are common to multiple generating facilities, they shall include a consideration of generating facilities which are the subject of all interconnection requests prior to the suspending customer's interconnection request for all generating facilities which are the subject of the interconnection requests within the suspending customer's queue cluster, and all generating facilities which were the subject of IRs at the time of the suspending customer's Phase II study report and are still modeled in the base case at the time the customer seeks to exercise the LGIA suspension right.

This would mean that IC could exercise suspension rights as to some network upgrades common to multiple (i.e. other) generating facilities-- when viewed from the time perspective of when the IC elects suspension under its LGIA. The suspension is allowable because, those generating facilities were part of the base case models at the time the suspending IC received its Phase II interconnection study.

As to "abandoned plant" recover for the PTO, the ISO proposes that the PTO shall be eligible for cost recovery for prudently incurred costs in the circumstances explained in the discussion above. Accordingly, the PTO would be eligible for cost recovery, even though the transmission asset associated with the work was later abandoned:

For expenses that are prudently incurred when evaluated from the time-perspective of the time when the IC had exercised the suspension right; and

Those costs were not recoverable either under the suspending customer's the LGIA (for situations where the IC continued on to complete the interconnection) or the suspending customer's financial security (for situations where the customer withdrew)

7.4.8. Consider incorporating PTO abandoned plant recovery into GIP

SCE's April 12 stakeholder comments included a proposal to "add to the GIP a provision whereby the PTO would be eligible for cost recovery for the network upgrades, despite later project abandonment, in situations where the PTO is required to upfront finance LGIP network

upgrades under the ISO tariff."²⁸ SCE distinguishes this situation from one where the PTO has voluntarily elected to up front fund network upgrades.

The ISO stated in the first iteration of the draft final proposal that the ISO was still taking in information regarding SCE's proposal and so did not yet have a position.

The working group discussions have allowed the ISO to receive and process further information. SCE has explained to stakeholders that it seeks to add to the ISO tariff components of the FERC concept of "abandoned plant approval" or "abandoned plant cost recovery" in four circumstances where SCE believes that application of the GIP or TPP (ISO Tariff Section 24 and Appendix Y section 12.2.2 & 12.3.1) requires the PTO to "involuntarily fund" network upgrades. This ISO understands these circumstances and the relation to the ISO tariff, to be as follows:

1) Circumstances where the PTO upfront finance and construct network upgrades because the ICs who has progressed to the point of making its second financial posting subsequently withdraws. This contingency relates to Section 12.2.2 of the GIP.

Discussion: The GIP provides that, when an interconnection customer withdraws at any time after during the Phase II interconnection study phase or thereafter, and the PTO and ISO agree that network upgrades are still required for the cluster group despite the fact that one or more particular customers in the queue cluster have withdrawn, PTO covers the cost responsibility of the withdrawn interconnection customers (to the extent that the withdrawing interconnection customer's financial security does not cover the it). If the network upgrades are determined by ISO, in coordination with the PTO, as not required for the cluster group after customers who were part of the Phase II studies withdraw, then the GIP intends for the PTO and ISO to de-scope the network upgrades. However, if de-scoping cannot occur—for example because the network upgrades have been included in the base case for subsequent cluster groups--and the subsequent queue cluster study process has reached the point where the IC's in the later tiered sg8tudy group of the subsequent queue cluster are cost *capped*, then the PTO would be required to upfront finance the amount that had been assigned to the ICs that withdrew.

ISO Proposal: The ISO proposes that the PTO shall be eligible for cost recovery in these circumstances, where the PTO and ISO determined that de-scoping was not appropriate and the PTO is required to cover the cost responsibility not covered by financial security of the withdrawing ICs.

2) Circumstances where the PTO is required to upfront finance and construct network upgrades because actual costs are higher than the IC maximum cost responsibility (identified as the lower of the Phase I or Phase II study reports). This contingency relates to GIP Section 12.3.1.

Discussion If the costs of the actual network upgrades construction costs are higher than the maximum cost responsibility of the customer (and thus the amount posted by the IC) then Section 12.3.1 provides that PTO finances the this differential. , In such cases, PTO expense recovery though TAC is appropriate. The ISO believes that this principle already exists in the GIP. However, SCE has expressed concern that later occurring

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²⁸ SCE's stakeholder comments were entitled "SCE Straw Proposal to be added to GIP Stakeholder Process", submitted by Gary Holdsworth for SCE, April 12, 2011, this point was made at p. 2

circumstances—such as changes in method of service configuration due to transmission licensing or other circumstances could attenuate the connection between cost recovery eligibility under existing GIP Section 12.3.1 and the final GIP interconnection work.

ISO Proposal: The ISO proposes that the PTO shall be eligible for cost recovery in these circumstances, where costs were incurred, even though the transmission asset associated with the work was later abandoned:

3) Circumstances where the ISO TPP, identifies interconnection upgrades that had not yet been set forth in an executed LGIA but are needed due to policy reasons. This contingency relates to ISO Section 24.4.6.5 [Transmission]

Discussion In this instance, if network upgrades are re-evaluated in TPP and the cost exceeds the generator(s) cost cap provisions then the PTO would be required to upfront finance the difference between the generator(s) cost cap and the actual cost.

ISO Proposal: The ISO proposes that the PTO shall be eligible for cost recovery in these circumstances, where costs were incurred, even though the transmission asset associated with the work was later abandoned:

4) Circumstances where an IC exercises its suspension right under Article 5.16 of the LGIA.

[See the draft final proposal discussion in section 7.4.7 above.]

7.5. Work Group 5 - LGIP Technical Assessments

7.5.1. Partial Deliverability as an interconnection option

Currently two deliverability status options are provided to the GIP interconnection requests under the Independent Study Process and Queue Cluster Process – Full Capacity (FC) or Energy Only (EO). Under the Queue Cluster Process, the generation interconnection project that has selected the FC option for the Phase I study could change the desired deliverability status to EO within 5 business days following the Phase I results meeting.

The ISO proposes to add a third deliverability status Partial Deliverability (PD) as an option to provide more flexibility and help the interconnection customers manage the cost responsibility associated with the delivery network upgrades. The interconnection customer could select PD and specify the desired PD level in MW in the interconnection request. The PD level in MW is the amount of installed capacity that requires deliverability.

The ISO proposes to allow the following changes to the deliverability status after the completion of the Phase I study:

- Change from FC to EO
- Change from FC to PD with a specified PD level in MW
- Change from PD to EO
- Reduction of PD level to a new specified PD level in MW or EO.

Pursuant to current Tariff Appendix Y section 6.5.2.1, the ISO performs 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. The ISO will continue performing the analysis and provide the advisory information. The advisory information could be used by the interconnection customers to address potential modifications to the deliverability level after the completion of Phase I interconnection study.

Based on stakeholder feedback in work group meetings and in discussions at the June 3rd stakeholder meeting, the ISO is adding the following text.

Pursuant to current Tariff Appendix Y section 6.9.2.2, the interconnection customers have 5 Business Days after the Phase I Interconnection Study Results Meeting to make modifications to their project information. After the ISO receives all of the submitted changes, the ISO, in coordination with the PTOs, will determine if the reductions in project sizes and PD levels are sufficient to eliminate the need for any identified Delivery Network Upgrades based on the best engineering judgment without any re-studies involved. If any Delivery Network Upgrades are determined they may no longer be needed, they will be considered to be removed from the Phase I plan of service for purposes of determining the Phase I posting. The ISO will inform interconnection customers if their plan of service has been reduced in a timely manner consistent with the process of notifying the interconnection customers of their required amounts for IFS posting after the ISO receives all submitted requests for modifications. The notification will also include the interconnection customers' updated Phase I security posting; however, this updated information will not affect the timing of the first financial security posting and the cost cap established by the Phase I study.

7.5.2. Conform technical requirements under the LGIA

The ISO has not changed any aspect of this proposal since the draft final proposal was posted on May 27, 2010.

In October 2010, the Federal Energy Regulatory Commission accepted the ISO's request to expand the applicability of Appendix H of the LGIA to all Asynchronous Generating Facilities, not just wind generators. The revised Appendix H clarified that all Asynchronous Generating Facilities, including solar photovoltaic technologies, must (1) satisfy specific low voltage ride-through (LVRT) and frequency ride-through requirements, and (2) operate within a power factor range of 0.95 leading to 0.95 lagging, measured at the Point of Interconnection, if the Phase II interconnection study shows that such a requirement is necessary to ensure safety or reliability. Currently, Section 1.8 of Appendix T, the SGIA, requires small generators to operate within power factor range of 0.95 leading to 0.90 lagging, except for wind generators. Wind generators are governed by Attachment 7, which largely tracks the provisions of Appendix H of the LGIA. This leads to two suboptimal outcomes that must be remedied. First, large asynchronous solar photovoltaic resources have a less stringent reactive power requirement than small solar photovoltaic resources. Second, "sympathetic tripping" by small solar photovoltaic facilities may exacerbate the impact of a disturbance because of the absence of any applicable ride-through standards.

The ISO proposes that the same technical requirements be applied to both small and large asynchronous generating facilities that interconnect to the ISO Controlled Grid. To implement this change the ISO would update Attachment 7 of the SGIA with the same provisions that are in Appendix H of the LGIA.

To align with the technical requirements for the asynchronous generating facilities, the ISO proposes to modify and organize Item 11 of Attachment A to GIP Appendix 1 Interconnection Request for the wind turbines and inverter based generation systems. The data specific to the induction generators will be moved from Item 11 to Item 7. The inverter data entries, such as maximum AC line current, inverter control mode and harmonics characteristics will be added to Section 11.

7.5.3. Revisit tariff requirements for off-peak deliverability assessment

The ISO has not changed any aspect of this proposal since the draft final proposal was posted on May 27, 2010.

Tariff Appendix Y section 6.5.2.2 requires the ISO to conduct an off-peak deliverability study for interconnecting generators where the fuel source substantially occurs during the off-peak hours (i.e., wind). This requirement could require these generators to fund full capacity deliverability upgrades based on an off-peak deliverability assessment. But since deliverability is a resource adequacy concept for the purpose of establishing NQC, which exists for the purpose of ensuring the deliverability of energy from RA resources to meet peak demand, this off-peak requirement does not align with the original concept and purpose of deliverability. The ISO would make changes to the off-peak study requirement so that deliverability remains an RA-based peak-hour concept and the network upgrades required for the resource to obtain FC status align with that concept.

Pursuant to Tariff section 24 reflecting the revised TPP approved by FERC in 2010, the ISO now has the comprehensive transmission planning process in place to identify transmission additions and upgrades needed to meet state and federal policy requirements and directives, and reduce congestion costs, production supply costs, transmission losses, or other electric supply costs results from improved access to cost-effective resources. Because off-peak energy deliveries are more related to these TPP concerns rather than RA deliverability, the ISO believes that the TPP is the appropriate venue to determine the network upgrades needed for off-peak energy delivery.

The ISO proposes that the off-peak deliverability assessments are performed for informational purpose only. For these assessments, the interconnection projects requesting Energy Only deliverability status will be dispatched at the same level as similar projects requesting Full Capacity deliverability status. For the transmission system limitations identified in the off-peak deliverability assessment, the ISO will identify conceptual network upgrade mitigations. Per unit estimated cost and typical permitting and construction time for the conceptual mitigations will be identified for informational purposes.

7.5.4. Operational partial and interim deliverability assessment

The ISO has not changed any aspect of this proposal since the draft final proposal was posted on May 27, 2010.

The ISO proposes to perform an operational partial and interim deliverability assessment as part of the Cluster Phase II interconnection study. The operational deliverability assessment is performed from the next year to the year when all the required delivery network upgrades are inservice. The next year assessment could be used by the ISO annual NQC process for the next RA Compliance Year. The rest of the future year assessment is advisory and provided for informational purpose only.

The operational deliverability assessment follows the same on-peak deliverability assessment methodology as posted at http://www.caiso.com/23d7/23d7e41c14580.pdf and takes a similar approach as specified in the technical bulletin issued last year called the *Partial Deliverability Analysis for Generation Interconnection Transition Cluster Phase II Projects* (http://www.caiso.com/2802/2802860e49b50.pdf).

The key components of the operational deliverability assessments are discussed below.

Generation Interconnection Project Commercial Operation Date

The assessment models the generation projects according to their Commercial Operation Date (COD). The latest COD information will be collected as specified below:

- COD in the Generation Interconnection Agreement (GIA) for GIA executed or filed unexecuted to FERC
- estimated COD in the latest study report for projects that have completed the interconnection studies but haven't signed the GIA
- the requested COD for projects in the current cluster

The COD will be further scrutinized for feasibility and adjusted if deemed infeasible. Factors used to adjust the COD include:

- Status and progress of the interconnection study or GIA
- PTO estimated time to complete the interconnection facilities and network facilities required for the interconnection
- Other information provided by the IC, such as letter of agreement to advance construction of interconnection/network facilities, generation facilities construction status.

The adjusted COD will be used in the operational deliverability assessment. In particular, projects that have not signed LGIA or not under construction are not considered as reasonable to have COD in the next year. The COD for such projects will be adjusted to a later future year.

Study Years

The assessment will be performed for each future year until the year before all the required delivery network upgrades in-service for the study group. For example, if the 2012 study cycle identifies delivery network upgrades to be in-service in 2019, the operational deliverability assessment will be performed from 2013 to 2018.

Modeling Requirements

For each of the study year, the assessment will model the generation projects with adjusted COD in or before the study year and network upgrade components that are projected to be inservice in or before the study year. In case a generation project will be implemented in phases, the phasing of the project will be modeled.

The resources, including generation, load, and import, will be modeled in accordance with the on-peak deliverability assessment methodology.

Method for Allocating Deliverable Partial Capacity

Assuming the system conditions cannot accommodate the full deliverability of all generators in the study area that will be in commercial operation for the study year, the partial deliverability of each generator is allocated as a function of the queue position, generator's size and its flow impact on the transmission constraint that is binding in the deliverability power flow.

For each deliverability constraint facility, the available capacity without the generation projects being tested is allocated to projects in the order from higher queued projects to lower queued projects until it is depleted. The projects in the same cluster are considered to have the same queue position. If there is available partial capacity for projects in the same cluster, the capacity is allocated based on the generator's size and its flow impact.

The project's partial deliverability level for a study year is the minimum of allocated partial deliverability capacity for all identified deliverability constraints.

7.5.5. Post Phase II re-evaluation of the plan of service

SCE has proposed to add to the GIP the ability for PTOs to request a re-evaluation of the post Phase II plan of service. Plan of service may require re-evaluation for various reasons, such as withdrawals of generation interconnection projects, licensing outcome, etc. Included in the re-evaluation, would be a provision whereby network upgrades that are no longer required due to withdrawing generation are removed from the pre-cluster base cases for future cluster studies.

The current tariff does not preclude a re-evaluation. The tariff states that "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."

The ISO, in coordination with the PTOs, has been making the determination whether the Network Upgrades identified for the previous clusters remain needed for generation interconnections in the previous clusters upon commence of a cluster Phase I or Phase II study. If it is determined that they are not needed, such Network Upgrades have been removed from the pre-cluster base cases. However, a more thorough re-evaluation is yet needed to modify the plan of service for generation projects that have completed the Phase II studies. The impact on the cost responsibility and GIA needs to be addressed.

The ISO proposes to address the issues as a sub-topic of TPP and GIP integration being resolved by Work Group. Please check the following link for updates into the new TPP GIP integration initiative²⁹.

²⁹ http://www.caiso.com/2ba3/2ba39d31a0b0.html

8. Next Steps

The ISO will host a meeting on July 7 from 10:00 a.m. to 4:00 p.m. to discuss the revised draft final proposal and answer questions. Prior to the July 7 meeting, the ISO will post a template for stakeholders to use when submitting written comments. The ISO requests that stakeholders submit written comments on the straw proposal by close of business July 14. However, if stakeholders want to offer comments in advance of the July 7 meeting, they are encouraged to submit those comments by close of business on July 6. All comments should be sent to GIP2@caiso.com. The ISO will post the written comments that it receives to the following web address: http://www.caiso.com/2b21/2b21a4fe115e0.html.

Attachment E Addendum to Revised Draft Final Proposal



Addendum to

June 30, 2011 Revised Draft Final Proposal

Generator Interconnection Procedures Phase 2

July 22, 2011 Market and Infrastructure Development This addendum to the ISO's June 30, 2011 revised draft final proposal for the Generator Interconnection Procedures Phase 2 stakeholder initiative ("GIP 2") describes certain changes made to the draft final proposal in response to the July 7, 2011 stakeholder meeting and written stakeholder comments submitted July 14, 2011.¹ This addendum, in conjunction with the June 30, 2011 revised draft final proposal, represents the final GIP 2 proposal that will be presented to ISO Board of Governors for approval at the August 24-25, 2011 meeting. The GIP 2 proposal set forth in the June 30 document and this addendum began as an issue paper posted on February 24, 2011, followed by a straw proposal posted on April 14, 2011, a draft final proposal posted on May 27, 2011 and a revised draft final proposal posted on June 30, 2011. The ISO's final changes to the GIP 2 proposal are described below. The ISO will be hosting a stakeholder call on July 29, 2011 to brief stakeholders on these changes.

#	Section # and Topic in Revised Draft Final Proposal	Changes/Clarifications in this Addendum	ISO Comment
1	7.3.1 Provisions for partial termination of an LGIA - The revised draft final proposal includes a requirement for eligibility that the generating facility project size must be 200 MW or larger at the time the IC seeks to add the partial termination provision option to its LGIA.	The final proposal will remove this requirement so that there will not be a minimum size threshold for the generating facility for which the IC seeks partial termination.	The primary eligibility factor is the three-year period between COD of the generating facility and the completion of the network upgrades. The ISO was persuaded by stakeholder comments that smaller projects should be given partial termination eligibility.
2	7.3.1 Provisions for partial termination of an LGIA – Stakeholders have asked the ISO to clarify the maximum cost responsibility when a customer upfront funds network upgrades and has elected partial termination. Stakeholders asked if an IC who exercises partial termination would be required to pay the partial termination charge in addition to 100% of the IC's cost responsibility set forth in the LGIA for the Network Upgrades.	The ISO adds the clarification that the partial termination charge will not result in the customer being responsible for more than 100% of their network upgrades cost responsibility when added to the partial termination charge. The IC will have to post more than 100% because the IC will have to post 100% of its financial security at start of construction and separately post a partial termination charge. These security instruments are for two different reasons (construction versus partial termination). Upon any exercise of a partial termination, the customer's LGIA security (for construction) would be	The ISO is making this change to make its proposal clearer on this point.

 $^{^{1}\ \} The\ revised\ draft\ final\ proposal\ can\ be\ found\ at.\ \underline{http://www.caiso.com/Documents/RevisedDraftFinalProposal-GenerationInterconnectionProceduresPhase2.pdf}.$

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#	Section # and Topic in Revised Draft Final Proposal	Changes/Clarifications in this Addendum	ISO Comment
		reduced by the principal amount attributable to the phase of network upgrades for which the customer exercised partial termination.	
3	 7.3.3 Repayment of IC funding for network upgrades associated with a phased generation facility - The relationship of repayment and phased COD for generating facilities is as follows: ISO standard five-year repayment for the transmission network upgrades begins once both of the things occur: The IC tenders notice under the LGIA that the particular phase of the generation project has achieved commercial operation; and, The network upgrades which the LGIA has sequenced as associated with the particular generating unit phase are in service. 	In general, this brings out the intended result (intended by ISO policy and based in FERC order 2003) that repayment should begin after both the transmission upgrades are in service and the generating facility achieves COD. Accordingly, repayment begins when the generator phase achieves COD and the sequence of network upgrades associated with that phase as specified in the LGIA that goes in service.	This proposal element has its basis in FERC's Order 2003-C which details how transmission credits are applied to customers who upfront fund network upgrades. The order at Paragraph 694 states the customer will start receiving transmission credits once the generating unit achieves COD and delivery service begins. It is the ISOs view that the most analogous interconnection service in the ISO footprint to "delivery service" applies to the circumstance when the PTO has built the network upgrades necessary for the generator to achieve the delivery status requested in the interconnection request (either Energy Only Deliverability Status—which pertains to Reliability Network Upgrades or Full Capacity Deliverability Status, which pertains to both Reliability and Delivery Network Upgrades).
4	7.5.4 – Operational partial and interim deliverability assessment - The proposal was silent on priority for determining partial and interim deliverability between Full Capacity interconnection customers and those seeking deliverability through the annual deliverability assessment. This addendum adds clarifying terms to interim operational deliverability assessment.	Under existing GIP, a customer seeking deliverability through the annual assessment are has lesser priority than a customer who is seeking Full Capacity Deliverability Status through a standard Interconnection Request. This further design point as to operational partial deliverability status explains that the same principle applies with respect to the operational partial and interim deliverability assessments that the ISO will perform. In the interim operational deliverability assessment, the projects obtaining Full Capacity under the annual full	ISO is clarifying study priority in this situation.

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#	Section # and Topic in Revised Draft Final Proposal	Changes/Clarifications in this Addendum	ISO Comment
		capacity deliverability option will be placed after the cluster that completes its Phase II study right before the annual full capacity deliverability assessment. For example, the projects in the 2013 annual full capacity deliverability study will have lower priority than Cluster 5, but higher priority than Cluster 6, in allocating interim partial deliverability. For projects that have elected one-time full capacity deliverability option, they have the same priority as Cluster 4.	
5	7.5.4 – Operational partial and interim deliverability assessment The revised draft final proposal states the following: Method for Allocating Deliverable Partial Capacity - Assuming the system conditions cannot accommodate the full deliverability of all generators in the study area that will be in commercial operation for the study year, the partial deliverability of each generator is allocated as a function of the queue position (note that all customers in a given queue cluster have the same queue cluster position), generator's size and its flow impact on the transmission constraint that is binding in the deliverability power flow. For each deliverability constraint facility, the available capacity without the generation projects being tested is allocated to projects in the order from higher (i.e. later) queued projects to lower (i.e. earlier) queued projects	The revised text for the proposal is provided below in redline/strikeout format: Method for Determining Deliverable Partial Capacity - Assuming the system conditions cannot accommodate the full deliverability of all generators in the study area that will be in commercial operation for the study year, the partial deliverability of each generator is determined from the amount of its power output that can be accommodated on a portion of the transmission constraint that is binding in the deliverability power flow. For each generator, the portion of the binding transmission constraint is calculated as a function of the queue position, generator's size and its flow impact on the constraint. For each deliverability constraint facility, the available capacity without the generation projects being tested is allocated to projects in the order from higher queued projects to lower queued projects	These points clarify the methodology under which the operational and partial deliverability assessments will be performed.

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#	Section # and Topic in Revised Draft Final Proposal	Changes/Clarifications in this Addendum	ISO Comment
	until it is depleted. The projects in the same cluster are considered to have the same queue position. If there is available partial capacity for projects in the same cluster, the capacity is allocated based on the generator's size and its flow impact.	until it is depleted. The projects in the same cluster are considered to have the same queue position. If there is available partial capacity for projects in the same cluster, each project's partial deliverability capacity is determined based on the generator's size and its flow impact.	
6	7.3.6 Interconnection refinements to accommodate QF conversions, repowering, deliverability at the distribution level and other special circumstances associated with small projects, including potential modifications to the Independent Study Process and Fast Track Processes - The change in this addendum clarifies how the IC maintains the deliverability for resources that are being repowered or reconfigured under Path 1.	The revised text for the proposal in three separate places is provided below in redline/strikeout format: Path 2: QF Commercial Conversion Only For existing generators that convert from QF to PGA status without repowering or reconfiguring their facility, the existing affidavit approach will be used. Path 5: Queue Cluster All new or repowered or reconfigured generators that seek Full Capacity Deliverability Status er do not otherwise satisfy the requirements for the foregoing paths would be subject to the general queue cluster provisions of the ISO's generator interconnection procedures Other Deliverability Issues: Deliverability of Repowered and Reconfigured Projects - For repowered or reconfigured generators, if the changes to the generating facility do not result in a different Point of Interconnection, the generator may utilize Path 1 and avoid the generation interconnection study process, and the deliverability status of the original generating facility at its most recently posted NQC will be	Clarifying the terms and conditions.

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#	Section # and Topic in Revised Draft Final Proposal	Changes/Clarifications in this Addendum	ISO Comment
		preserved. If the generator wants to obtain deliverability for a greater MW amount, the MW quantity above the most recently posted NQC will be subject to the deliverability analysis component of the interconnection study process and potential responsibility for delivery network upgrade costs under the generation interconnection procedures.	
7	7.2.2 Generators Interconnecting to non-PTO facilities in the ISO BAA - Adding clarifying language that a non-PTO interconnection facility would be repaid for deliverability Network Upgrades (to the CAISO-controlled grid only) following completion of those Network Upgrades and the commercial operation of the generation facility.	Adding item 4 to 7.2.2: 4. Non-PTO interconnection facilities seeking full capacity deliverability status on the CAISO-controlled grid will receive repayment of funds posted for the construction of the delivery Network Upgrades on the PTO system in the same manner as ISO interconnection customers as specified in ISO Tariff Appendix Y Section 12.3.2.	The ISO is adding clarifying language to the proposal.
8	7.2.3 Triggers for Financial Security Posting Deadlines – Item 2 under the Phase I Posting text currently reads: "2. If the IC proposes any revisions to the report the IC shall provide written comments within ten business days of receipt of the report, but in no case less than five business days before the ISO scheduled results meeting." Also, item 2 under the Phase II Posting text currently reads: "If the IC proposes any revisions to the report the IC shall provide written comments within ten business days of receipt of the report, but in no case less than five business days before the ISO scheduled results meeting."	The ISO has revised the proposal to provide the IC with more time to turn around comments to the draft report. The revised text for the proposal is provided below in redline/strikeout format: For item 2 under the Phase I Posting text: "2. If the IC proposes any revisions to the report the IC shall provide written comments within ten business days of receipt of the report, but in no case less than five three business days before the ISO scheduled results meeting." For item 2 under the Phase II Posting text:: "If the IC proposes any revisions to the report the IC shall provide written comments	This change provides the IC with two additional business days to provide comments to the draft report for discussion at the results meeting.

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#	Section # and Topic in Revised Draft Final Proposal	Changes/Clarifications in this Addendum	ISO Comment
		within ten business days of receipt of the report, but in no case less than five three business days before the ISO scheduled results meeting."	
9	7.3.2 Reduction in size for permitting or other extenuating circumstances – The revised draft final proposal does not expressly state the "source" that will be used to as the basis to establish the MW capacity of the generating facility.	The requested level of project reduction will be based on the MW capacity of the generating facility stated by the interconnection customer in Appendix B of the Interconnection Request. The IC is required, following the Phase 1 study results meeting, to complete Appendix B and reaffirm for the ISO and PTO the generating capacity size and other attributes of the proposed generating facility so that these specifics be utilized in the Phase II study process.	The ISO is providing this further explanation to clarify for stakeholders what the percentage is based upon.

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Attachment F Memorandum to the CAISO Governing Board



Memorandum

To: ISO Board of Governors

From: Keith Casey, Vice President, Market & Infrastructure Development

Date: August 18, 2011

Re: Decision on Generator Interconnection Procedures Phase 2

This memorandum requires Board action.

EXECUTIVE SUMMARY

In recent years, the context for new generation interconnection has changed in California as a result of state environmental policies, such as the 33% Renewable Portfolio Standard, which have resulted in a large influx of renewable generation projects seeking to interconnect to the ISO grid. The ISO has already made important enhancements to its interconnection and transmission planning processes to align with the new policy context, but Management continues to identify needs for additional changes as the ISO and its stakeholders gain more experience in the new context. Management is seeking the Board of Governors' approval of its proposed generator interconnection procedures phase 2 provisions. This effort is a continuation of the initiative commenced last year to enhance and streamline the generator interconnection procedures, which combined small and large generator interconnection requests into a single cluster study process, and created two new streamlined study tracks to allow qualified projects to proceed independently of – and more quickly than – the cluster study.

Management developed the proposed 18 generator interconnection provisions submitted for Board approval to:

- Resolve holdover issues from the generator interconnection procedures phase 1 initiative last year;
- Address impacts on interconnection policies deriving from the new transmission planning process approved by FERC last year; and

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¹ The independent study process allows projects of any size to be studied for reliability only and on a shorter study track. The fast track study process allows projects under 5 MW to be studied with minimal cost and study time.

 Provide additional flexibility to projects across the interconnection process through enhancements to: 1) the initial study process; 2) the process for repowerings and small generators; 3) posting requirements; and 4) deliverability assessments.

The generator interconnection procedures phase 2 stakeholder initiative contained 28 different topics spanning a diverse set of activities in all areas of the generator interconnection procedures. These topics were divided into five "work group" areas to narrow the focus and improve the efficiency of stakeholder meetings to work on the issues. Stakeholders were active participants in those work group sessions and helped develop the various elements of the proposal. The resulting 18 provisions that involve changes to the tariff proposed for Board approval will achieve the following benefits:

- Greater certainty around interconnection and study processes;
- Improved interconnection-related repayment provisions for generation developers with phased projects;
- Additional flexibility for reductions in project size;
- More streamlined interconnection processes for smaller resources, repowerings and conversions of qualifying facilities;
- Greater clarity on interconnection cost and security requirements;
- Abandoned plant protection for participating transmission owners; and
- New partial deliverability and interim deliverability options for generation projects.

A few additional topics that were included in the initial scope of the proposal were later deferred and are not included for approval. Management expects that the evolving state and federal policy landscape most likely will continue to require enhancements to the interconnection procedures, and has already planned a generator interconnection procedures phase 3 initiative to begin in early 2012. That phase will address the topics deferred from phase 2 and others that may be identified by that time. In addition, Management has started a separate stakeholder initiative to address the need for greater coordination between generator interconnection and transmission planning, and plans to bring a proposal on this topic to the Board for decision in December.

Management recommends that the Board approve the 18 generator interconnection procedures phase 2 provisions described in Attachment 1 to this memorandum and authorizes Management to develop the necessary tariff revisions.

Moved, that the ISO Board of Governors approves the proposed tariff change regarding the generator interconnection procedures, as described in the memorandum dated August 18, 2011 and Attachment 1 thereto; and

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

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BACKGROUND

Interconnection Reform Prior to Generator Interconnection Procedures Phase 2

In 2008, the ISO implemented fundamental generator interconnection reforms that, among other things, abandoned the prior serial study approach in favor of a new cluster approach and introduced new financial security provisions intended to reduce the then-existing project backlog and provide developers with greater cost and schedule certainty. In September 2009, the ISO adopted additional modifications that recalibrated the financial security posting provisions to better align with existing economic conditions. In August 2010, the ISO obtained authority to waive financial security postings for network upgrades funded by participating transmission owners.

Most recently, in October 2010, in response to a proliferation of small generation interconnection requests, the ISO filed a proposal to combine its small and large generation interconnection study processes into a single cluster study approach, which FERC approved on December 16, 2010. This reform has significantly streamlined the overall interconnection study process and provides greater cost and schedule certainty to small generators, which now account for over 3,000 MW of renewable resources in the ISO's interconnection queue. On the same date FERC also approved the ISO's new transmission planning process, which included significant steps toward greater integration between generation interconnection and transmission planning.

The Generator Interconnection Procedures Phase 2 Initiative

Since the generator interconnection procedures phase 2 stakeholder process began in March 2011, ISO staff and stakeholders have invested a great deal of time in stakeholder meetings, work groups and conference calls to improve virtually every aspect of the interconnection process. Importantly, stakeholders have not only participated, but have actually submitted the source material for many of the proposals currently before the Board. These include:

- Southern California Edison submitted proposals on abandoned plant, suspension provisions and post-phase 2 study plan of service;
- GenOn submitted proposals on repowering and deliverability assessments for small projects;
- CalWEA proposed greater flexibility to allow a generator to expand capacity without submitting a formal interconnection request;
- Ormat submitted proposals to allow expansion 'behind the breaker' without triggering a new interconnection request;
- Large Solar Association submitted proposals on interim deliverability, draft phase 2 study report clarifications, modifications to interconnection security requirements and modification of project size; and
- Large Solar Association submitted proposal on timing of financial security postings.

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As noted above, the numerous improvements included in this proposal do not represent the end of this initiative. Much work lies ahead in tariff and business practice manual development, and Management expects stakeholders to be equally involved in these upcoming activities. In addition, as noted above, Management intends to begin a new phase 3 initiative early in 2012 to consider further improvements to the generator interconnection procedures. Therefore, given the large list of potential topics for consideration with stakeholders that could lead to enhancements, the present initiative should not be viewed as the final opportunity to obtain beneficial improvements to the generator interconnection procedures, but only as a significant step to address the most urgent needs.

POSITIONS OF THE PARTIES

Stakeholder Process

Between March and July 2011, ISO staff conducted four stakeholder meetings, 12 work group meetings and several stakeholder calls. Staff also provided four opportunities to provide written comments. As noted above, many stakeholders provided written material that Management used as a basis to develop the proposals in the revised draft final proposal published on June 30, 2011 and the addendum that was published on July 22, 2011. ISO staff also conducted outreach to individual stakeholders to gain additional insight into positions and areas of concern. Some elements of the final phase 2 proposal were not supported or were contested by several stakeholders. Stakeholder comments and Management's response are discussed in the matrix in Attachment 2.

Elements of the proposal that have not received broad stakeholder support.

<u>Substantial Performance</u> – Much of the developer community expressed concern that a generation project would face excessive risk due to the fact that the ISO could hold a developer in breach or terminate an interconnection agreement if the full MW amount of the project is not completed. Management has partially addressed this concern with the proposal that allows a generation project to reduce its size under certain circumstances (see reduction in project size, item 5 in Attachment 1). Developers are still concerned, however, that for size reductions beyond what these new provisions allow, the possibility of breach or termination still exists, and it is not sufficiently clear what the consequences of such action would be. Management has identified this matter for further discussion as part of the phase 3 initiative.

Abandoned Plant (Item 14 in Attachment 1) – The municipal utilities, including Six Cities and the Bay Area Municipal group, do not support the abandoned plant provisions on grounds that shifting all risk of abandoned plant costs to transmission ratepayers negates effective transmission project management by the participating transmission owners. The Bay Area Municipal group also asserts that the FERC abandoned plant approval process is an effective means to determine cost responsibility and should not be bypassed. FERC staff has indicated this proposal could be problematic as it goes against FERC precedent.

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There are clear circumstances in which a participating transmission owner could be obligated to fund network upgrade costs above the amounts posted by interconnection customers. If construction of the upgrade is later terminated, the participating transmission owner must apply to FERC for abandoned plant cost recovery. ISO tariff provisions approving abandoned plant cost recovery under the circumstances identified in this initiative would decrease uncertainty for the participating transmission owner and simplify the FERC filling process. To allay the concerns of the municipal parties, such a tariff provision would apply only to costs that were prudently incurred by the participating transmission owner, and would not obviate FERC's ability to review the prudency of the participating transmission owner's expenditures. Management therefore believes that such provisions impose minimal risk on transmission ratepayers.

Repayment Provisions for Phased Projects (Item 6 in Attachment 1) — Developers and one participating transmission owner argue that repayment for funding of network upgrades should begin when the generation project or the specified generation project phase reaches commercial operation, regardless of whether the associated transmission network upgrades are yet in service. They assert that the purpose of holding the interconnection customer's funds is only to mitigate the risk to ratepayers that the generation project may not be completed, but once commercial operation is achieved, that risk no longer exists and there is no further reason to hold the funds.

Based on FERC Order 2003, which provided the regulatory basis for ISOs and RTOs to develop generation interconnection procedures, it is appropriate to hold interconnection customer funds for network upgrades until those network upgrades are completed and the generation project achieves commercial operation. However, Management's proposal allows the parties to each interconnection agreement – the interconnection customer and the participating transmission owner – to determine the extent to which completion of network upgrades should be a condition for repayment of the customer's funds.

<u>Project Size Reductions (Item 5 in Attachment 1)</u> – Developers asked the ISO to allow a 20% "safe harbor" for project size reductions instead of the 5% proposed by Management. They assert that 5% is too small to address the risk that permitting and environmental challenges could force projects to be substantially re-sized after the interconnection agreement is signed.

Today's generator interconnection rules allow no safe harbor at all, such that any failure of a developer to put the project into operation at the full MW amount could trigger a breach of the interconnection agreement. The proposal for a 5% safe harbor is an important improvement because it allows a 5% reduction for any reason, and thus may cover diverse problems such as the failure of the facility to perform at its intended nameplate capacity, or small configuration changes to address environmental or land-use restrictions. Management believes that the 5% safe harbor is the largest reasonable amount for this provision because: (a) if this amount were increased significantly, it would undermine incentives for developers to specify their actual project size intentions, and would instead invite developers to deliberately over-size their projects with the expectation that they could exercise a cost-free reduction option later; and (b) if permitting or environmental challenges force a larger reduction in project size, the ISO will consider the customer's request on a case by case basis (in the two

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instances where this has occurred in the past the ISO has approved the size reductions). Some developers recognized the benefits of Management's proposal and supported the 5% reduction safe harbor.

Partial Termination Provisions – Special provisions for partial termination of a generation project were developed last year in response to a request by several developers with renewable projects that are being developed in phases. The special provisions allow a developer to cancel a later phase of a generation project by payment of a pre-specified charge rather than face the uncertain consequences of a breach of the interconnection agreement as would otherwise be required. During the generator interconnection procedures phase 2 stakeholder process, the ISO sought to standardize these provisions in the tariff. However, SCE, SDG&E and the CPUC do not support the proposal. SCE has voiced concern that the proposal as presently structured could cause unnecessary transmission upgrades to be built and could add uncertainty to the back end of the interconnection process. Specifically, SCE is concerned that it could remain unclear for some period of time exactly what the final project build out and associated transmission facilities will be. SCE advocates that these provisions not be hard-wired into the tariff, as they are complicated and casespecific to each project. Further, SCE argues that these situations should be negotiated individually upon a request of the developer and then filed as non-pro forma contracts. SDG&E recommends that projects instead use multiple interconnection requests. The CPUC has requested changes to the proposal, such as the amount of the termination charge (i.e., that it be much higher than proposed). Also, it believes that a better approach is to not standardize this complex issue in the tariff at this time and instead discuss it further in the separate initiative to integrate the generator interconnection procedures and the transmission planning process. In addition, although several developers have offered conditional support for the concept, they do not support several of the specific provisions of the proposal.

Given that there is not broad support for the proposal, Management believes that it is not appropriate at this time to attempt to standardize this complex issue and hard-wire provisions in the tariff. Rather, Management recommends that the option of partial termination be preserved and available for use when requested by the developer. It can then be negotiated among the parties, as it was successfully done in 2010 for two projects and for one project so far this year. FERC has already approved the use of partial termination provisions in the two interconnection agreements that were filed last year. With FERC approval of interconnection agreements that incorporate these provisions, the ISO, participating transmission owners and developers have a template to work from should the scenario present itself in future interconnection agreement negotiations. This topic also can be addressed in phase 3 if stakeholders desire to revisit this topic.

MANAGEMENT RECOMMENDATION

Management requests Board approval of the 18 generator interconnection procedures phase 2 proposals described in Attachment 1. The benefits of implementing these mechanisms will further improve and streamline interconnection procedures across nearly all aspects of the interconnection process.

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Provisions submitted for Board decision Generator Interconnection Procedures Phase 2 Initiative

(Items that require tariff changes)

Item No.	Topic
1	Generators interconnecting to non-participating transmission owner facilities in ISO
	balancing authority area - Develop procedures to perform deliverability studies when a
	generator is connecting to the transmission facilities of a non-participating transmission owner
	that is located inside the ISO balancing authority area.
2	Triggers for Financial Security Posting Deadlines – Add a new step in the ISO study
	process to allow the interconnection customer to review and comment on draft study reports
	and develop provisions on the concept of "substantial errors" that would trigger a revision of a
	report.
3	<u>Definitions of start of construction and other transmission construction phases and</u>
	posting requirements at each milestone – Include new provisions to allow generation
	projects to post the third and final security posting based on the separate and discreet
	generation phases being built.
4	<u>Information provided by ISO through internet postings</u> – Develop new tariff guidelines to
	clearly state what information the ISO considers to be confidential and must be posted to a
	protected ISO web site.
5	Reduction in generator project size for permitting or other extenuating circumstances –
	Allow developers to reduce the size of their project by 5% after execution of the interconnection
	agreement for any reason, and greater than 5% for environmental or permitting reasons on a
•	case by case basis.
6	Repayment of interconnection customer funding for network upgrades associated with
	phased generation facility — Develop new tariff guidelines to allow a phased generation
	project to be repaid for network upgrades based on when the commercial operation date of the
	generating facility is placed in service and the sequence of corresponding network upgrades
7	specified in the interconnection agreement is achieved.
,	Accommodate qualifying facility conversions, repowering, deliverability at distribution level and other special circumstances associated with small projects, including potential
	modifications to independent study process and fast track study process – (1) Add
	provisions explaining how a review would be conducted to determine whether a repowering or
	reconfiguring generation project will be subject to interconnection procedures,(2) add provisions
	how a review would be conducted when a qualifying facility converts to a participating generator
	status, (3) add new tariff procedures to allow the fast track study process to apply to existing
	facilities of 5 MW or less, (4) add new tariff guidelines to apply technical and business criteria for
	facilities using the independent study process, and (5) clarify how resources can maintain their
	deliverability when repowering or reconfiguring.
8	Second and third financial security posting requirements to offset participating
	transmission owner funded network upgrades (incorporating ISO's interconnection
	procedures 2010 tariff waiver into generator interconnection procedures) - Add tariff
	provisions to allow an interconnection customer to be relieved of the obligation to post the
	second and third financial security postings for network upgrades that the participating
	transmission owner has committed to upfront fund on behalf of the interconnection customer.

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Item No.	Topic
9	Interconnection agreement insurance requirements – Revise insurance requirements in the
	interconnection agreement to relieve the ISO from procuring insurance, to add others as
	additional insurers and to require the participating transmission owner to tender insurance
	information only when requested by the interconnection customer.
10	Adjusted versus non-adjusted dollars in interconnection study reports and
	<u>interconnection agreements</u> – Standardize the use of time-adjusted dollar calculations used
	by the participating transmission owners in the calculation of interconnection and study cost
	reports.
11	Financial responsibility cap and maximum cost responsibility – Clarify that the
	interconnection customer's maximum cost responsibility is the lower of the phase 1 or phase 2
	interconnection study cost estimates.
12	"Posting cap" to financial security postings of participating transmission owner's
	interconnection facilities — Clarify that the financial security posting requirements for the
	participating transmission owner's interconnection facilities is the same as for the participating
40	transmission owner's network upgrade financial security posting requirements.
13	Interconnection agreement suspension rights – Amend the suspension provisions to clarify
	the conditions under which an interconnection customer could suspend network upgrades that
14	are common to multiple generating facilities. Participating transmission owner 100% abandoned plant recovery – Add new abandoned
14	plant provisions to apply to prudently incurred expenses when the participating transmission
	owner is required under certain circumstances to upfront finance network upgrades if an
	interconnection customer withdraws, if a change in the base case causes additional network
	upgrades to be constructed above the maximum cost responsibility of the generators, or if
	through the transmission planning process additional network upgrades are required that had
	not been set forth in the interconnection agreement.
15	Partial deliverability as interconnection option – Add provisions to allow an interconnection
	customer to select partial deliverability as an option in the study process.
16	Technical requirements under interconnection agreement – Apply the same technical
	requirements for both small (up to 20 MW) and large (greater than 20 MW) asynchronous
	generators that connect to the ISO grid.
17	Off-peak deliverability assessment – Amend the tariff provisions requiring the ISO to conduct
	an off-peak deliverability study for interconnecting generators where the fuel source
	substantially occurs during the off-peak hours (i.e., wind) to state that the off-peak deliverability
	assessments are performed for informational purposes only.
18	Operational partial and interim deliverability assessment – Add new tariff authority to
	perform an operational partial and interim deliverability assessment as part of the cluster phase
	2 interconnection study.

M&ID/G. Cook Page 8 of 8



Board of Governors

August 25-26, 2011

Decision on Generator Interconnection Procedures Phase 2

Motion

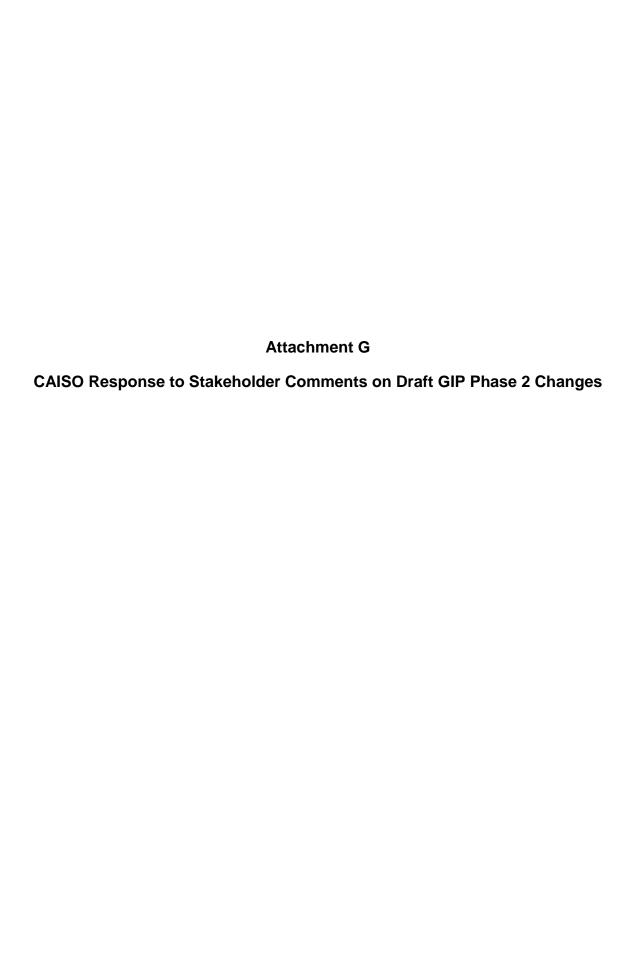
Moved, that the ISO Board of Governors approves the proposed tariff change regarding the generator interconnection procedures, as described in the memorandum dated August 18, 2011 and Attachment 1 thereto; and

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

Moved: Galiteva Second: Foster

Board Action	n: Passed	Vote Count: 4-0-0
Bhagwat	Υ	
Foster	Υ	
Galiteva	Υ	
Maullin	Υ	

Motion Number: 2011-08-G4



<u>Guide to ISO Revisions to Draft GIP Phase 2 Tariff Amendment Language</u>
(Changes to Sept 30 Draft in response to written comments and Oct 12 and 13, 2011 stakeholder conference calls)

Ref	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
#			·
		GIP (Appendix Y)	
1.	LSA (made on a call)	GIP Section 2.4.3 – The phrase "for purposes of Interconnection Financial Security" should be added to the third paragraph of the section between "Interconnection Studies" and "will be set forth"	The first requested correction is unnecessary. The ISO has included the second change.
2.	SDG&E	GIP Section 2.4.3 – Comments that the third paragraph should read " All cost estimates for Interconnection Facilities and Network Upgrades contained in Interconnection Studies will be set forth in present dollar costs as well as timeadjusted dollar costs, adjusted to the estimated year of construction of the components being constructed"	The phrase "adjusted to the estimated year of construction of the components being constructed" has been included in the last paragraph.
3.	LSA	GIP Section 3.6 – Add phrase "within the defined timeframe"	To address the concern, the ISO has added the phrase (such posted information to be placed on the CAISO Website behind secured portals as necessary to protect any Critical Energy Infrastructure Information

ISO Public Document

Note: While this Nov 1 version of tariff language represents the ISO's near-final draft, that the ISO reserves the right to make changes to this Nov 1 version prior to filing at FERC.

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
			contained therein) after the words "under CAISO Tariff Section 24.2.5.2" in the existing sentence.
4.	LSA	GIP Section 4.2.1 – Modify phrase in first bullet point under "Technical criteria" to read "added to the Generating Facility"	The ISO has changed the language to say "the total nameplate capacity of the existing Generating Facility plus the increase increment capacity"
5.	LSA	GIP Section 4.2.1 – Comments and proposed edits regarding bullet points under "Technical criteria"	The ISO agrees with comment during the stakeholder calls that the (third) bullet relating to separate breakers/expansion breakers should be stricken. The ISO has removed the bullet. The CAISO has also modified the final technical criteria bullet to state that "The processing of an Interconnection Request for behind-the-meter expansion under the GIP Independent Study Process shall not result in any increase in the rated Generating Facility electrical output (MW capacity) beyond the rating which preexisted the Interconnection Request.
			Further, the processed Interconnection Request shall not operate as a basis under the CAISO tariff to increase the Net Qualifying Capacity of the Generating Facility beyond the rating which pre-existed the Interconnection Request." The last sentence of the bullet has been stricken, as

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
			the statement that the IC's avenue for increasing deliverability is to use the Section 8.3 annual deliverability process is really an advisory statement that is better suited for the FERC transmittal letter.
6.	LSA, SCE	GIP Section 4.2.1 – Add phrase "Partial Deliverability" to first bullet point under "Business criteria"	The ISO has included the edit.
7.	LSA	GIP Section 4.2.1 – Question in third bullet point under "Business criteria" whether this bullet means the same thing as the last bullet in the technical session.	The ISO response is that the bulleted section means that the IC can request switch its behind the meter ISP to a regular ISP under which the proposed modification is studied under an interconnection study for purposes of adding an increase increment to the rated MW generating facility output and get the increase increment incorporated into the GIA. The ISO has also restated the points in the final bullet of the business criteria as follows: "The Interconnection Customer may at any time request that the CAISO convert the Interconnection Request for behind the meter expansion to an Independent Study Process Interconnection Request to evaluate a increase increment of electrical
			output (MW generating capacity) for the existing Generating Facility. The Interconnection Customer must accompany

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
			such a conversion request with an appropriate Interconnection Study Deposit and agree to comply with other sections of Section 4 applicable to an Independent Study Process Interconnection Request."
8.	SDG&E	GIP Section 4.2.1 – The provisions under the heading "Technical criteria" are mostly or completely inapplicable with regard to solar generators	First, the ISO has clarified what are the two sets of requirements by creating subsections (4.2.1.1 and 4.2.1.2) for each requirement set. Second, the ISO has modified the language in section 4.2.1.2 to make the clarification that SDG&E has made that the second set of requirements (now Section 4.2.1.2) only applies to solar PV and wind technologies. The ISO has made this change because it concurs with SDG&E that the technical criteria can only be applied to solar PV or wind technologies.
9.	SDG&E	GIP Section 4.2.1 – Comments that the language is confusing because of initial wording and the use of the terms "first" and "second" set of requirements	The ISO has addressed this comment by making changes to the initial sentence and restructuring to two sets of requirements as subsections.
10	Generator stakeholder comment from conference call	GIP Section 4.2.1 – The third bullet point under the heading "Technical criteria" should either be deleted in its entirety or the language highlighted by the ISO in its posting should be deleted	In the conference call discussion of the bulleted item, various stakeholders suggested that it would be better to delete the bullet entirely. The ISO has done so.
11	Stakeholder comment on conference call	GIP Section 4.2.1 – In the stakeholder discussion on the third bullet around the	See comment above—the ISO has deleted the bullet entirely.

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
		meaning of the term "GIAC," one stakeholder offered the interpretation that GIAC means "GIA capacity," <i>i.e.</i> , the capacity that existed before expansion occurred.	
12	LSA	GIP Section 4.6 – Add phrase that begins "if it is a new"	The ISO has added parenthetical references to account for an IR which covers an increase in capacity of an existing unit which makes the clarification that LSA seeks.
13	LSA	GIP Section 4.6 – Add phrase that begins "Projects that meet"	The ISO believes that this point is more than a clarification and so the ISO declines to make the change. The point of an ISP "behind the meter expansion" is to restore lost deliverability. The comment seeks to introduce into the GIP the resource adequacy consequences of such an ISP processing—whereas resource adequacy consequences are a matter outside of the scope of the GIP. The existing section refers to details in the facility attainment of full capacity deliverability status when the purpose of the IR is to cause full capacity deliverability status (or greater partial deliverability status).
14	CAC-EPUC	GIP Section 5.1 – Modify the cross- reference in the second paragraph to read "CAISO Tariff Section 25.1(d) or -(e)" [meaning a reference to Section 25.1(e) should be added]	The ISO agrees and has made this change.

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
15	LSA	GIP Section 6.5.2.2 – LGA expressed confusion over language referring to customer election of build network upgrades and inclusion in financial security postings and requested certain clarifying statements included that the upgrades were not required for full capacity deliverability and will not be included in postings or cost responsibility.	The ISO has made modifications to the section that address LSA's points. The ISO has also removed the last sentence of the Sept 30 posted language relating to desire to build identified network upgrades in this section.
16	LSA	GIP Section 6.7 – LSA edits relate to the discussion of the off peak deliverability transmission upgrades.	The ISO has removed the last sentence of the Sept 30 posted iteration of Section 6.7 that referred to IC election to construct network upgrades. The text inadvertently introduced the possibility of IC election to have the PTO build the off peak delivery upgrades under the GIP.
17	SCE	GIP Section 6.7 – edits relate to the discussion of the off peak deliverability transmission upgrades.	See ISO response above.
18	LSA	GIP Section 6.8 – LSA has requested additional opportunity to provide comment later than three business days before the Results Meeting.	The ISO has relocated the pre-results meeting comment provision to 6.9, as this section addresses the Phase 1 Results Meeting and post meeting comments. The ISO has modified the language to provide the customer an opportunity to provide comments later than three days, but notes that such comments will be considered as informal inquiries. This allows the customer to raise the issues and then formalize them

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
	SDG&E	GIP Section 6.9 SDG&E has suggested that the ISO add a new requirement stating that The CAISO shall provide to parties at the Phase I Results Meetings a summary of the Interconnection Customer's financial security amounts due, the appropriate due date for the posting of the security, the details of calculations of the amounts due, and (if applicable) cost allocations between PTOs for network upgrades	in written comment within the 3 business days after the Results meeting window. The ISO has not made this change at this time and is of the opinion that it should be considered for GIP 3. The ISO communicates with the PTOs and cross-shares information to arrive at the numbers, which takes some time. SDG&E typically has a few number of ISO-grid interconnection requests than the other two PTOs in a given cycle. So the ISO infers from the recommendation that SDG&E that it can calculate such numbers for and cross-verify accuracy with the ISO before the results meetings. But this may not be true with respect to the work for the requests in the SCE and PG&E service territory portions of the ISO grid. The ISO requests SDG&E to re-raise the matter as a GIP Phase 3 item. In the meantime, the ISO will make inquiries with to the PTOs to see if the practice is feasible to incorporate into upcoming results meetings.
20	LSA	GIP Section 6.9.3 – LSA comments that a customer should have the right to revisit changes described in 6.9.3 at a later time if a revised report is issued.	The ISO has not made this change. The request adds a new design point and so the potential impact on the PTO and ISO work load was vetted in the stakeholder process. LSA should raise the request in GIP Phase3, where there will be a chance for

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
			such evaluation and stakeholder input.
21	LSA	GIP Section 6.9.4 – Under the existing GIP, the ISO and PTO evaluates (without a restudy) the potential impact on initial posting amounts for a customer if the customer elects to downsize the facility from the generating capacity size studied in Phase 1 LSA suggests that it could be helpful if the CAISO could provide this information prior to the customer making any downsizing decisions.	The request adds an additional design element to the proposal—that the ISO provide preliminary determinations that are accurate enough for the customer to base its decision on. This reverses the current approach, where the ISO's action would be based on the customer's finalized decision based in writing. Altering the process as LSA suggests could require the ISO to provide firm estimates before it does the evaluation work, or do it twice—once before the customer makes any decision to downsize and once again after the customer intakes the information and possibly alters its request. This has workload and timing implications on the process, subjects which were not evaluated in the Phase 2 stakeholder effort. The ISO has not incorporated the design point suggested here. The ISO suggests that LSA raise the matter again when stakeholders and the ISO turn to scoping of GIP Phase 3.
22	LSA	GIP Section 6.10.1 – LSA has commented that the idea of substantial error should apply also to the Independent Study Process and the Fast Track.	The ISO has modified Section 6.10 to apply to Independent Study Process Reports as well as cluster study reports. The ISO has also made a modification to 9.2.2 to allow the customer an additional posting time of the later of 90 days of the original report or

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
			30 days from the revised final report. The ISO has also made a modification to Section 9.3.1 to allow the customer an additional posting time of the later of 120 days from the original report or 30 days from the revised report.
			The ISO is not convinced that the substantial error concept applies to any Fast Track study report, as any written report is expected to evolve less study work than the other types of reports. If LSA and other stakeholders have further input on that subject, it is appropriate for GIP Phase 3.
23	Clean Coalition	GIP Section 6.10.1 – Suggests that different, smaller dollar figures be used as part of the dollar number thresholds for substantial error as applied to small generators.	This comment requests a change in the result that is the outcome of the GIP Phase 2 process. As the threshold was specifically discussed and modified from original proposal to final design element in Phase 2 process, the ISO does not believe it is appropriate to reopen the design point now.
24	SCE	GIP Section 6.10.2 –SCE requests that "If a revised report is required for any Phase I or Phase II study, then the start date for the Interconnection Customer to submit comments, or the issuance of draft Generator Interconnection Agreement, and the due date for interconnection financial security postings should reset	The GIP Phase 2 does provide that late-issued revised extend the date for financial postings (see GIP Phase 2 tariff amendment language for Sections 9.2 and 9.3). Possible extension for issuance of the initial interconnection agreement was not specifically discussed in stakeholder meetings, and so the impact of delay and

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
		based on the issuance date of the final revised report."	the interrelationship of pushing out this date with other GIP activities going on at this time was not evaluated. The GIP Phase 2 proposal does extend out the time for negotiating the GIA. The ISO is not willing at this point to embed the extension idea into the tariff at this time until further discussion and evaluation is done. The ISO suggests that SCE's suggestion is an appropriate GIP Phase 3 topic.
25	LSA	GIP Section 6.10.3 – LSA suggested adding the phrase "though the required Interconnection Financial Security amounts may be adjusted" To reflect that non substantial errors may prompt adjustment of posting amounts.	The ISO has modified Section 6.10.2 (instead of 6.10.3). to address LSA's point. This section addresses non substantial errors and study addenda. The ISO has added the words "although the error or omission may result in an adjustment of the corresponding Interconnection Financial Security" to the end of the first sentence
26	Various commentors on telephone conference call.	GIP Section 7.1 – Various parties suggested clarification of certain text in this section and suggested that the method for allocating partial deliverability (item (iii) be removed from the tariff and placed in the GIP BPM)	The ISO has removed the detailed provisions of the operational partial and interim Deliverability Assessment from the GIP Phase 2 tariff amendment language and has stated that the methodology for performing the assessment will be published on the ISO website or within a Business Practice Manual. The ISO has retained some details of the former subsection (ii) but modified it to state "The operational Deliverability Assessment will be performed

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
7			for each applicable queue cluster study group for each applicable study year through the prior year before all of the required Delivery Network Upgrades are in-service. The CAISO will consider operational Deliverability Assessment results stated for the first year in the pertinent annual Net Qualifying Capacity process that the CAISO performs for the next Resource Adequacy Compliance Year. The study results for any other years studied in operational Deliverability Assessment will be advisory and provided to the Interconnection Customer for its use only and for informational purposes only"
27	LSA	GIP Section 7.1 – Comment that the detail in the section should be in the BPM	See note above. The ISO has removed the detail, to be included in the BPM or a separate ISO website posting.
28	SDG&E	GIP Section 7.1 Please clarify what the new sentence "Beginning with Queue Cluster 5, the Phase II Interconnection Study will incorporate eligible Interconnection Requests from the previous Phase I Interconnection Study" means Does this imply that beginning with Cluster 5 (and applicable to all the subsequent Clusters), the Phase II studies will incorporate results for IRs from the Phase I studies from previous Clusters	No. All the sentence does is memorialize the fact that, beginning with Cluster 5, the ISO no longer does a combined Phase II interconnection study report for two prior clusters. As parties will recall, the original GIPR scheme called for Clusters 1 and 2 to have a combined Phase II study and also for Clusters 3 and 4 to have a combined cluster study. In the 2010 GIP tariff amendment (GIP Phase 1), the ISO left the approach for clusters that were already underway and

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
		(Clusters 1 – 4 for Cluster 5 Phase II)?	structured GIP to begin the new approach with Cluster 5.
29	LSA	GIP Sections 7.1(i) & 7.1(ii) – LSA included some suggested edits and parsed out questions about how the methodology worked for various scenarios.	The tariff writing implications of this comment is no longer addressed, since the detail points will be addressed in BPM or webpage. LSA can ask clarifying questions in connection with that later process to develop the detail points.
30	PG&E	GIP Section 7.1(ii) – PG&E requests clarification in the following sentence: "Generating Facilities obtaining Full Capacity Deliverability Status under the annual full capacity deliverability option will be placed after the cluster that completes its Phase II Interconnection Study immediately before the annual full capacity deliverability assessment." Which "annual full capacity study" is this sentence referring to if not the current cluster under study? Aside from the cluster studies, there is no other annual full capacity study.	The tariff writing implications of this comment is no longer addressed, since the detail points will be addressed in BPM or webpage. In answer to the question, however, the sentence was referring to the annual process under Section 8.3 when referring to the "annual process." The substantive point came from the GIP 2 final revised proposal.
		GIP Section 7.1 (iii) PG&E requests clarification on the definition of "lowest transfer distribution factor." This references Section 6.5.2, which describes the deliverability assessments. However,	PG&E can re-ask its question about the transfer distribution factor in the later process to develop the detail points.

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
		there is no mention of this term in that section	
31	LSA	GIP Section 7.1(iii) – questions regarding the method for allocating deliverable partial capacity.	These questions can be re-asked and addressed in the later effort.
32	LSA	GIP Section 7.4 – requests additional language to confirm that financial security postings do not extend to off peak transmission upgrades	The ISO has addressed the point with additional language in 7.4 and in Section 6.5.2.2, (the off peak deliverability assessment tariff section)
33	SCE	GIP Section 7.4 – requests additional language to confirm that off peak transmission upgrades are not covered by cost cap or postings	See comment above.
34	LSA	GIP Section 7.5 – LSA has made suggested similar to Section 6.8 which relate to the Phase I results meeting.	The ISO has relocated the provision for premeeting comments and response to comments to Section 7.7 for the same reasons that the ISO relocated the comment provisions for the Phase I results meeting to Section 6.9. The ISO has modified the language to true it up to the ISO's revisions for Section 6.9 The modified provision to provides the customer an opportunity to provide comments later than three days, but notes that such comments will be considered as informal inquiries. This allows the customer to raise the issues and then formalize them in written comment within the 3 business days after the Results

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
			meeting window.
35	LSA	GIP Section 7.7 – LSA suggested modifications to the post-meeting comment process. t	See ISO response above.
36	LSA	GIP Section 8.4 – LSA requests to strike the works "for the purpose of supplying Resource Adequacy capacity to a Load Serving Entity" as not needed.	The ISO has made the requested deletion
37	PG&E	GIP Section 8.4 –PG&E notes that the language does not address how to handle those projects that have already completed their interconnection studies, but where the CAISO was not involved in conducting the study	PG&E is correct. The situation PG&E describes (retrospective application to existing facilities) was not the subject of the GIP Phase 2 process. And the CAISO has not changed the provision to cover retrospective application for that reason.
38	LSA	GIP Section 9.2.2 – As an extension of its comment on Section 6.10 (substantial error) LSA comments that reference to adjusted posting dates due to substantial error should be referenced in this section and that the idea of substantial error should apply also to the Independent Study Process and the Fast Track.	The ISO concurs and has made modifications to 9.2.2 to allow the customer an additional posting time of the later of 90 days of the original report or 30 days from the revised final report. The ISO has also made a modification to Section 9.3.1 to allow the customer an additional posting time of the later of 120 days from the original report or 30 days from the revised report.
39	SCE	GIP Section 9.3.2 –suggested language edits.	The ISO has incorporated the points raised by SCE.
40	SunPower	GIP Section 9.3.2 – Sunpower requests deletion of the phrase "milestone dates for posting", preferring to delete the word	The ISO has made a revision to address the point by changing the language to state "into discrete smaller Interconnection Financial"

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
		"date", commenting that "some network upgrades may have uncertain construction start dates due to uncertainty of the PTO to obtain necessary permits or CPUC approval. The milestones set to allow phase postings of Third IFS should be flexible enough to respond to milestones that are "permit" driven rather than driven by hard dates."	Security deposit amounts and may establish discrete <i>milestones</i> (however, outside dates must be included) dates for posting the amounts corresponding to each discrete component and/or phase of construction related to the Network Upgrades and/or Interconnection Facilities described in the Generator Interconnection Agreement The ISO believes that financial posting deadlines should not be left open-ended in the GIA, based solely upon a condition external to the GIA. The LGIA must provide for some resolution (amendment, LGIA termination, or some other path for resolution).
41	LSA	GIP Section 9.3.3 – Suggested deletion of the word "unequivocally" in first paragraph of section	The ISO does not agree with this edit; "unequivocally" comes from FERC order on waiver.
42	LSA	LSA suggests various changes to the terms of Section 9.3.3 to change the time frames for various steps in the outlined process.	The suggested changes revisit the proposal design terms—these terms have been expressly included in iterations of the written proposal documents since the May 27, 2011 Draft Final Proposal. The ISO does not believe it is appropriate to entertain a change in design parameters at this late date, as doing so would cause the proposal to differ from the proposal terms which the Aug 25 ISO Board resolution authorized ISO management to file with FERC.

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
		Note: The ISO has transferred pertinent provisions of Section 9.3.3 into the LGIA as Article 11.5.2.3	See Note below re changes to Appendix CC and new Article 11.5.2.3 within near final posted tariff text.
43	LSA	GIP Section 11.2 – LSA suggests to add a provision expressly stating that the negotiation period will be extended day for day for any delay in issuance of the initial draft of the GIA.	The suggested edit introduces a new item in the design proposal which was not discussed in the stakeholder process. At the LGIA stage of the interconnection process, several different work efforts are happening within the PTO and ISO which involves hand off of the interconnection processing to contract negotiators and attorneys. Impact of the suggested delay on internal processes has not been evaluated. For this reason, the ISO declines to introduce the new item at this late date. The ISO suggests that the issue be addressed in GIP Phase 3. The ISO also notes that the current GIP allows parties the opportunity to agree to extend the LGIA negotiation period if necessary. In addition, the GIP 2 proposal already extends the overall LGIA negotiation/execution period for an additional 30 days.
44	LSA	GIP Section 12.3.1 – LSA states that the reference to capital costs should be changed to "costs".	The ISO agrees and has made the edit. The ISO has also rewritten the new paragraph so that the paragraph in this Section and parallel paragraph 12.3.2 mirror each other. The rewritten paragraph states: "To the extent that this Section operates to impose

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
45	LSA	GIP Section 12.3.2.2 LSA has suggested various changes on various points, including 1) limiting the timing of the offset right to the time of dispute resolution; and 2) repeating its opposition to the proposal's repayment element stating that the Network Upgrades for which repayment commences must be placed in service.	upon the applicable Participating TO(s) cost responsibility for financing or construct Network Upgrades (which cost responsibility was previously assigned to Interconnection Customer(s) under GIP Section 7.3 and 7.4) in excess of what is covered by the Interconnection Financial Security posted by such Interconnection Customers, the Participating TO(s) shall be presumed to be eligible, subject to prudency and any other applicable review by FERC, to include such costs in its TRR(s)." The ISO has made changes to address several of LSA's points. The ISO has not made changes to items 1) and 2), for these reasons 1) The repayment provisions are contained in the LGIA as well as the GIP. Because Article 27.1 already states that "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," and offset is such a right in law, the ISO is unclear what the additional effect the proposed offset would have—in other words, the GIP

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
			provision would not add anything. Logically, therefore, the provision only adds to the GIP if the right of offset can be exercised at the same time as the payments are being made. 2) The ISO's reasoning behind the provision that the Network Upgrades must be in service was mentioned at the Aug 25 Board meeting. The stream of payments that repays the customer comes from the Transmission Access Charge (TAC). The PTOs have informed the ISO that the PTOs place the Network Upgrades into their Transmission Revenue Requirements for recovery through TAC only after the Network Upgrades are in service. So the ISO is of the opinion that the GIP Phase 2 provision does not impose any new requirement, but only makes clear what was a "behind the scenes" prerequisite for recovery in TAC. In the renewable development paradigm, where generation facility construction can be modular, the ISO believes it is necessary to make the previously implicit requirement express in the tariff.

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
	SunPower	GIP Appendix 1 – SunPower has asked certain clarifying questions regarding Appendix 1 to the Interconnection Request	 While the ISO does not propose changes to the Appendix, the ISO provides the following information in answer to the questions. 1) Re: "Number of inverters to be interconnected pursuant to this Interconnection Request:", SunPower asks whether this should be deleted as redundant with item 2E, above. The ISO response is that, while item 2E applies to any type of generator, this item only applies to inverter based generators. 2) Re "Max design fault contribution current", SunPower asks whether this
			intended to replace Section 8, above, for Inverter-Based machines? ISO's response is that, for inverter based
			generators, this item substitutes for Section 8.
			3) Re: Harmonics Characteristics, Sunpower suggests a change to "something like 1Compliance with IEEE 519 Harmonics Requirements (Y/N)' or asks that more detail be provided about what information is being asked for

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
n e			regarding Harmonics Characteristics if harmonics studies are actually going to be performed.
			The ISO's response is that the information is This is usually provided by the manufacturer as percentage of the rated power with the order of the harmonics, e.g. <3% THD at rated power. Alternatively, the customer can answer "compliant with IEEE 519".
			4) Re Start-up requirements, SunPower states that it is unclear as to what is being asked for, and asks if the ISO is asking for kW, kVAR during startup SunPower further asks if the information requested is just for the inverter or for the plant (including transformers), and asks further, whether the information sought refers to black start or startup during morning.
			The ISO response that the ISO is seeking any known requirements for cold start, which could be the KVar during startup for the entire plant.

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
		LGIA (Appendix CC)	
		Note: The ISO has transferred pertinent provisions of the new GIP Section 9.3.3 (Offset for PTO Up Front Funding) into the LGIA as Article 11.5.2.3	See Article 11.5.2.3 in near final tariff text posting.
47	LSA	Proposes to delete the three-pronged definition of "common to multiple Generating Facilities" included in the ISO's draft language and replace it with the following sentence: "The Interconnection Customer's right of suspension under this section shall not apply to the extent that exercise of that right would delay the Commercial Operation Date or otherwise adversely impact any other Generating Facility in the CAISO interconnection queue at the time of the suspension."	The request re-introduces an LGA suggestion made in the stakeholder process that was not incorporated into the proposal. The ISO declines to make the requested change. In the stakeholder process LSA offered changes indicating that it wanted the "forward look" into the interconnection queue cluster —which is for purposes of identifying Network upgrades common to "multiple generating facilities"—to extend only into the next cluster after the interconnection customer's cluster. This limiting horizon was not the one chosen in the stakeholder process or approved by the Board. Under the finalized proposal the LGIA provision provides that the "forward look" will be extend to all interconnection requests which existed at the time of the customer's Phase II study and are still active—still modeled in the base case—at the time the suspending customer seeks suspension. The ISO does not believe that this does more than clarify what current practice is. It appears that the

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
			new language which LSA proposes (offered after the close of the stakeholder process and Board approval of the proposal) has implications on ISO and PTO workload and would not provide any party guidance, in advance of actual suspension, what impact the suspension rights would have—the ISO would need to do a factual evaluation in each case and only after that evaluation was completed would one know how long the suspension could run. The ISO believes that the impact of LSA's proposed change has not been sufficiently vetted and comes too late, procedurally.
48	LSA	LGIA Article 5.19.4 – LSA requests change to have the decision to permit 5% downsizing be made by the ISO instead of jointly by PTO and ISO.	The ISO has changed the section to state that the decision re downsizing will be made by the ISO in consultation with the PTO. The ISO has made LSAs change lowering the standard of customer effort from "diligent" to "reasonable." To the extent that there is any change in legal effect, LSA"s change departs from the proposal as approved by the Board.
49	SunPower	LGIA Article 5.19.4 – Requests that the language referencing the benchmark for the 5% change be changed from the	The ISO declines to make the change. SunPower correctly points out that there could have been an accepted change in MW

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
		Appendix B form the customer submits before the commencement of Phase 2 studies to the size in the LGIASunpower states that "there may have been an accepted nonmaterial modification before the signing of the GIA.	size after the commencement of Phase II and such reduced size is incorporated into the LGIA. The ISO design proposal chose the Appendix B form precisely to avoid the result that the reduction "safe harbor" is more than 5% from the commencement of the Phase II study. SunPower's added provision would open the possibility for a safe harbor reduction to exceed the threshold of 5% of the MW size chose by the customer after receiving the Phase I study results.
		SunPower notes that it "reserves the right to challenge this policy that modifications in excess of 5% would be evaluated by measure other than whether the change is a Material Modification.	This issue is related to the prior point: The ISO has explained in the proposal and stakeholder process that permitting downsizing in an environment where the ratepayer ultimately repays the customer for network upgrades means that • the customer downsizing may transfer to the ratepayer some risk of building network upgrades too soon, or of building larger upgrades will ever be needed, and • it is not appropriate to allow a circumstance where a customer may oversize its project in the early process to speculate on being able to

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
			opportunity fails to arise, be indemnified by the ratepayer by transferring the ultimate cost of oversized transmission to the ratepayer.
50	SunPower	LGIA Section 5.19.4– Suggests amending the sentence in the third paragraph to add "Unless otherwise agreed to by Parties and reflected in the amended GIA" to the beginning of the sentence stating that a permitted reduction will not diminish an IC's cost responsibility or right to repayment with respect to network upgrades to add the phrase at the beginning of this sentence: "	The ISO declines to make this change. By itself, the ISO is of the opinion that the phrase does not add anything, as parties may agree to modify a standard contract terms. Secondly, adding the provision now has a premature forcing effect upon policy issues to be considered in GIP Phase 3. The ISO does not desire to formulate policy provisions on this subject outside of a stakeholder process, in the context of an LGIA negotiation. And inclusion of the requested phrase suggests that the ISO policy position is up for negotiation through the LGIA process.
51	LSA	LGIA Article 11.4.1 – The LGIA article implements GIP Section 12.3.2 (repayment). LSA correlates here its comments and suggested edits that LSA made to changes to Section 12.3.2	See ISO response to GIP Section 12.3.2, above The ISO's edits to this LGIA article correlate to those identical provisions (as edited) in 12.3.2
52	SCE	LGIA Article 11.4.1.2 – Suggests first line to be rewritten as Upon the Commercial Operation Date of each phase of a Phased Generating Facility and corresponding Network Upgrade	The ISO has added "and the in-service date of the corresponding Network Upgrades" into the first sentence of the LGIA Article. The language carries over the design point on repayment that applies to all projects—

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
		Suggested edit	the ISO has said repeatedly in the stakeholder process that the GIP Phase 2 repayment proposal treated a non phased project to be the same as a one-phased project. So the addition just carries the repayment provisions into the LGIA provision pertaining to single phased projects.
53	SCE	LGIA Article 18, et seq18.3.2changing "general commercial liability to "commercial general liability" ISO has made this change	-18.3.2 The ISO has made this change.
		18.3.3 (auto) strike "Upon request of the Participating TO to restore obligation to pre-GIP Phase 2 obligation for customer to provide insurance in every case, not just when PTO specifically asks for additional insured status.	The ISO declines to make this change-changing the default setting transfers administrative work from the PTO to the customers, in the stakeholder process, customers stated that this change would reduce an administrative burden of automatically having to provide the additional insured status and no counterpoint argument was offered.
		18.3.5 change sentence to read "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	18.3.5—The ISO is agreeable to this change as it comports with customer stakeholder input that insureds often find it difficult to get their insurers to agree to provide advanced written notice of changes in coverage or conditions.

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
		the Other Party Group prior to the anniversary date of cancellation or any material change in coverage or condition." 18.3.10 include a self-insurance option for parties to opt to self-insure for Employers' Liability and Workers' Compensation insurance as long as the party is a qualified self insurer in the state in which the point of interconnection is located.	18.3.10 The ISO will include a employers' liability/workers' compensation self-insurance option. Currently the LGIA does not provide an option for self insurance for employers' liability and workers' compensation insurance. The ISO is willing to add the option, which would be available to either the PTO or the interconnection customer.
54	SunPower	LGIA Article 18.3 – SunPower desires to add a alternative standard for insurance carriers by adding discretion "or as otherwise approved by the CAISO."	The ISO declines to make the change. The suggested change was not vetted in the stakeholder process to identify the frequency or scope of such requests or to identify standards by which the ISO would "otherwise approve" the insurance. Moreover, it is possible that, since the Participating PTO is the primary party to benefit from the coverage, it might be necessary for the PTO to participate in the approval or be designated as the party to co-approve.
55	SunPower	LGIA Article 18.3.1 proposes to strike "which shall list the Participating TO as an	The ISO has made the deletion.

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
		additional insured," noting that additional parties cannot be added to workers' comp insurance.	
56	SunPower	LGIA Section 18.3.5 –proposes to add to waiver of subrogation (except in any case of gross negligence or willful misconduct)	The ISO has not made the requested change. The GIP Phase 2 added language provides a meet and confer avenue for situations where the subrogation or advance written notice provisions cannot be obtained, which would address the issue. The ISO is not willing to include the requested qualifier unless parties can represent to the ISO that including this qualifier to the subrogation waiver is standard. During the stakeholder process, the only discussion on the point was that the subrogation or advance notice waivers may be hard to obtain at all, which is why the "meet and confer" provision was drafted and added.
		SGIA (Appendix T)	
57	SunPower	SGIA Attachment 7 –SunPower raises various concerns regarding the incorporation of the asynchronous language from the LGIA into the SGIA.	The ISO responses are as follows:
		SGIA, Attachment 7 [these comments reflected in the attached file] 1) There is no waiver for projects that may have procured significant	This point is raised after stakeholder discussion on the point is closed and

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
		equipment prior to a specific date, unlike that which was proposed to FERC for the LGIA, in Section Ai or elsewhere. If a developer has procured UL-listed inverters, there may be commercial repercussions to that developer due to the	there is no further opportunity for discussion of the impact of the "commercial repercussions" versus the added requirement. Accordingly, the ISO declines to make the change.
		modified language. 2) Section A iii (Power Factor) refers to the LGIA—Change to SGIA?	 Sunpower is correct that the reference should be to SGIA and not LGIA. The ISO has made the change.
		3) Section A iii (SCADA) and Section A iv (PSS) should be Sections iv and v, respectively	 Sunpower is correct that the small Roman numeral numbering was off. The ISO has corrected the numbering.
		4) Section A iii (SCADA) has added Automated Dispatch System (ADS) capability. SunPower questions why this was added as a default requirement for smaller projects	 The inclusion of Automated Dispatch System in the title was an error. The ISO has removed the reference.
		5) Section A iii (SCADA): SunPower requests that SCADA information requirements similar to that used regarding Power Factor, namely "If the Phase II Interconnection Study shows that such a requirement is necessary to ensure safety and	5) This point is raised after stakeholder discussion on the point is closed and there is no further opportunity for discussion of the requested change re SCADA information requirements and SunPower's alternate proposal to used the same requirement as Power
		reliability." Given the potential cost implications of this requirement,	Factor. Accordingly, the ISO declines to make the change.

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
		clear demonstration of the need for SCADA information should be provided by the CAISO and PTO.	
		CAISO Tariff Section 24	
58	SCE	Tariff Section 24.4.6.5 – SCE asks to modify and add to the last sentence of the ISO proposed tariff text to state This presumption shall not apply in the cases of Network Upgrades which the applicable Participating TO has agreed to voluntarily up-front fund finance Network Upgrades or components thereof or additions thereto; unless that voluntarily commitment has been terminated and the Participating TO is nevertheless required to assume responsibility for Network Upgrades or components thereof or additions thereto under the provisions of the CAISO Tariff independent of any obligation to fund pursuant to the Transmission Planning Process.	The ISO declines to make the suggested edits. SCE explained on the conference call that the modification was intended to cover circumstances where SCE has voluntarily elected to up front finance a customer's Network Upgrades but then there is a breach of the LGIA/termination of the LGIA by the customer. The circumstance and requested language exceeds the scope of "abandoned plant treatment" which SCE proposed in the stakeholder process. Accordingly, the proposal as adopted by the ISO Board does not extend to this item. The ISO cannot agree to modify the proposal terms to provide for CAISO Tariff coverage of this PTO risk by ratepayers when the matter has not been approved by the Board.
59	LSA	Tariff Section 25.1 – LSA is concerned	The ISO agrees with the concept behind the

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
		about the Participating TO joining in the determination of whether the generating project qualifies for Section 25.1 treatment and requests to change part of the ISO proposed text as follows: The CAISO and/or the applicable Participating TO [only the CAISO should verify compliance with the CAISO tariff] shall be authorized to verify whether the requirements of Section 25.1(b), -(c), -(d), and -(e) apply to each existing Generating Unit, and the owner of the existing Generating Unit, or its designee, shall be responsible for any costs related to that verification process pursuant to the Business Practice Manual.	suggested edit and has made the following change. "The CAISO and/or the applicable Participating TO shall be authorized to verify whether the requirements of Section 25.1(b), -(c), -(d), and -(e) apply to each existing Generating Unit, and the owner of the existing Generating Unit, or its designee, shall be responsible for any costs related to that verification process pursuant to the Business Practice Manual. The CAISO may engage the services of the applicable Participating TO in the ISO's conducting such verification activities, in which case such costs shall be borne by the such party making the request under Section 25.1, and such costs shall be included in any CAISO
60	CAC/EPUC	Tariff Section 25.1 – Comment that the transmittal letter should include a commitment/assurance that costs for "LGIA roll-over" under Section 25.1 should approximate the costs for evaluation of a Fast Track interconnection request. (not a proposed tariff change)	invoice for verification activities. The ISO will consider CAC/EPUC's suggestion that the transmittal letter for the GIP Phase 2 tariff amendment include language indicating that the aspiration of the ISO and the stakeholders is that costs for conversions of QFs to participating generators should be "similar to that imposed under the Fast Track Process" so that Combined Heat and Power generators are assured that costs will not be

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
#		CAC-EPUC also suggests to change the verification process language so that the ISO verifies compliance with requirements "in consultation with the PTO" instead of jointly with the PTO.	unreasonably high. The ISO did note on the conference calls, however, that the ISO cannot absorb such costs to "keep the price comparable" and that the extent of costs will depend upon the amount of work required by the ISO (and possibly the Participating TO) to bring about the conversion. The ISO noted that it has experience in which the anticipated "administrative action" turned out to require substantial work because the generator-owner did not have documentation to verify it's claimed performance/output nor any records of original interconnection study. The result was that the ISO was required to undertake substantial investigation efforts to assist the generator in verifying the characteristics of its own unit. In such cases, the ISO cannot promise that costs will be equivalent to a simple "administrative roll-over" and it is inappropriate for the generator to expect parties who pay the ISO's GMC to absorb a cost that is attributable to the ownership and business activities of the generator.
			The ISO has made the revision noted in comments to LSA above to address CAC-

Ref #	Stakeholder	Tariff Section – Comment	ISO Response on Oct. 12 & Oct. 13 Calls
			EPUC's concern



Blacklines Generator Interconnection Procedures Phase 2 Draft Tariff Language November 2, 2011

[CAISO Note to Stakeholders: Bracketed references such as [GIP Item #1] refer to the numbered GIP phase 2 changes on document "Table of GIP Phase 2 changes"]

CAISO Note to Stakeholders: Changes made since the last posting of the draft tariff language are highlighted in yellow

Appendix Y For Interconnection Requests Generator Interconnection Procedures (GIP)

* * *

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.

* * *

[GIP item #6] "Phased Generating Facility" shall mean a Generating Facility that is structured to be completed and to achieve Commercial Operation in two or more successive sequences that are specified in a GIA, such that each sequence comprises a portion of the total megawatt generation capacity of the entire Generating Facility.

* * *

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, the elected output of a Generating Facility seeking Partial Deliverability Status [GIP item #15] 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 [GIP item #17] set forth in GIP Section 6.5.2.

All cost estimates for Interconnection Facilities and Network Upgrades contained in Interconnection Studies will be set forth in the Interconnection Study report in present dollar costs as well as time-adjusted dollar costs, adjusted to the estimated year of construction of the components being constructed.

* * *

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, or are in the CAISO's third Queue Cluster, 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, or are in the CAISO's third Queue Cluster, 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.

* * *

3.6 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 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 (such posted information to be placed on the secure CAISO Website to protect any Critical Energy Infrastructure Information contained therein). [GIP item #4] The CAISO shall post to the secure CAISO Website any

documents or other materials posted pursuant to this GIP or a Business Practice Manual that contain Critical Energy Infrastructure Information.

* * *

4.2.1 Flow Impact Test

[GIP item #7 (Proposal Item "Path 4")] An Interconnection Request shall have satisfied the requirements of this Section the Item impact test if it satisfies, alternatively, either the one of two sets of alternative requirements set forth in GIP Section 4.2.1.1 or the set of requirements set forth in GIP Section 4.2.1.2.

4.2.1.1 Requirement Set Number One General Independent Study Requests: irst set of requirements under this GIP Section 4.2.1:

<u>The CAISO</u>, in coordination with the applicable Participating TO(s), will perform the flow impact test for <u>aneach</u> 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.

4.2.1.2 Requirement Set Number Two: econd set of requirements under this GIP Section 4.2.1for
Requests for Independent Study of Behind-the-Meter Expansion for Solar PV and Wind
Technologies

This GIP Section 4.2.1.2 applies to an Interconnection Request relating to a behind-the-meter expansion where the existing Generating Facility prime mover is wind technology or solar photovoltaic technology and the proposed behind-the-meter expansion technology is of the same type. Such an Interconnection Request submitted requesting to be processed under the Independent Study Process will satisfy the requirements of GIP Section 4.2.1 pass the flow impact test if it satisfies all of the following technical and business criteria for behind-the-meter capacity expansion of a Generating Facility:

(i) Technical criteria.

- The total nameplate capacity of the existing expanded Generating Facility plus the increase incremental increase in capacity does not exceed in the aggregate twenty-five (25) percent of its previously studied capacity and does not exceed, in the aggregate, one hundred (100) MW.
- The behind-the-meter capacity expansion shall not take place until after the original Generating Facility has achieved Commercial Operation and all Network Upgrades for the original Generating Facility have been placed in service.
- The Generating Facility under a separate breaker (the expansion breaker) at all times. Alternatively, and with the consent of the CAISO and the Participating TO, the the Generating Facility operator may decide whether the generation modules that will be tied to the expansion breaker can be a mixture of GIAC facilities and the expansion facilities. The total capacity behind the expansion breaker remains less than or equal to the planned behind-the-meter capacity expansion figure. [CAISO NOTE TO STAKEHOLDERS: UNLESS FURTHER CLARIFICATION CAN BE PROVIDED, THE ISO PROPOSES TO STRIKE THE HIGHLIGHTED LANGUAGE TAKEN FROM THE GIP 2 PROPOSALI

- Unless specifically requested by the CAISO, the total output of the Generating Facility does not exceed its originally studied capacity at any time. The CAISO will have the authority to trip the expansion breaker if the total output of the Generating Facility exceeds that amount.
- The processing of an Interconnection Request for behind-the-meter expansion under the Independent Study Process shall not result in any increase in the rated Generating Facility electrical output (MW capacity) beyond the rating which pre-existed the Interconnection Request. Further, the processed Interconnection Request shall not operate as a basis under the CAISO Ttariff to increase the Net Qualifying Capacity of the Generating Facility beyond the rating which pre-existed the Interconnection Request.—The Interconnection Customer may submit a request pursuant to GIP Section 8.2 to FCapacity DS.

(ii) Business criteria.

- The Deliverability Status (Full Capacity, Partial Deliverability or Energy-Only) of the capacity expansion is the same as the Deliverability Status specified for the formally studied Generating Facility.
- The GIA is amended to reflect the revised operational features of the Generating Facility capacity expansion.
- The Interconnection Customer may at any time request that the CAISO convert the Interconnection Request for behind-the-meter expansion to an Independent Study Process Interconnection Request to evaluate an increase incremental increase in-of electrical output (MW generating capacity) for the existing Generating Facility. The Interconnection Customer must accompany such a conversion request with an appropriate Interconnection Study Deposit and agree to comply with other sections of GIP Section 4 applicable to an Independent Study Process Interconnection Request. -formally study the expanded capacity of the Generating Facility in the GIP study process and formally add that capacity to its GIA capacity so that the expanded capacity can be released from the operational restrictions after the GIP studies are completed and the Interconnection Customer has complied with all of the applicable requirements.

* * *

4.6 Deliverability Assessment

Interconnection Customers under the Independent Study Process that requests Partial or 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 (or increase in capacity of an existing 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 (or increase in capacity) will be treated as an Energy-Only Deliverability Status Generating Facility until such Delivery Network Upgrades are in service.

* * *

Section 5 Fast Track Process

5.1 Applicability and Initiation of Fast Track Process Request

Applicability to a proposed Generating Facility. 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 is requesting Energy-Only Deliverability Status 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.

[GIP item #7 (Proposal heading "Path 3")] Applicability to an existing Generating Facility. If the Interconnection of an existing Generating Facility meets the qualifications for Interconnection under CAISO Tariff Section 25.1(d) or (e) but, at the same time, the Interconnection Customer also seeks to repower or reconfigure the existing Generating Facility in a manner that increases the gross generating capacity by not more than 5 MW, then the Interconnection Customer may request that the Fast Track Process be applied with respect to the repowering or reconfiguration of the existing Generating Facility that results in the MW increase incremental increase in MW.

<u>Initiating the Fast Track Interconnection Request.</u> 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.

* * *

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 Deliverability Assessment and Off-Peak Deliverability Assessment (which will be for informational purposes only beginning with the Phase II Interconnection Study for Queue Clusters 3 and 4), 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).

* * *

6.5.2 Delivery Network Upgrades.

6.5.2.1 The On-Peak Deliverability Assessment. [GIP item #15]

The CAISO, in coordination with the applicable Participating TO(s), shall perform an On-Peak Deliverability Assessment for Interconnection Customers selecting Full Capacity or Partial 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 or Partial 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 or Partial 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 or Partial Deliverability Status to meet the requirements for deliverability. Deliverability requires that the Generating Facility Capacity, or the portion of Generating Facility Capacity designated for Partial Deliverability, 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 or Partial 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 or Partial 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. [GIP item #15 and #17]

The CAISO, in coordination with the applicable Participating TO(s), shall perform an Off-Peak Deliverability Assessment for to Interconnection Customers selecting Full Capacity Deliverability Status in their Interconnection Requests to determine identify Delivery Network Upgrades transmission upgrades in addition to those Delivery Network Upgrades 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. -The transmission upgrades Delivery Network Upgrades will be identified under this Section te ensure shall comprise those needed for 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, to be 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. Beginning with the Phase II Interconnection Study for Queue Clusters 3 and 4, this assessment will be performed for informational purposes only, and any Delivery Network Upgrades identified in this assessment will be conceptual in nature, and the transmission upgrades identified for under this Section will not be included in a plan of service within the applicable Interconnection Study report.

Beginning with the Phase II Interconnection Study for Queue Clusters 3 and 4, the ISO will perform the Off-Peak Deliverability Assessment performed under this Section 6.5.2.2 for Interconnection Customer informational purposes only, and any Delivery Network Upgrades identified in the assessment will be referred to as "off peak deliverability transmission upgrades," the description of such upgrades in any report will be conceptual in nature, and such transmission upgrades will not be included in a plan of service within the applicable Interconnection Study report.

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 <u>transmission upgrades</u> <u>Delivery Network Upgrades</u> identified in the Off-Peak Deliverability Assessment <u>performed during the course</u> <u>of the oas part of Phase I Interconnection Study shall be estimated in accordance with GIP Section 6.6. <u>However, because these transmission upgrades shall be conceptual in nature only (as of the Phase II Interconnection Study for Clusters 3 and 4), <u>then</u>, beginning with that study, <u>the transmission upgrades identified in this Section 6.5.2.2 shall be treated as follows:</u></u></u>

- these transmission upgrades will not be required for the proposed Generating
 Facility (or proposed increase in capacity) that is the subject to the
 Interconnection Request to achieve Full Capacity Deliverability Status;
- the estimated costs for these transmissionsuch upgrades. The estimated costs of Delivery Network Upgrades identified in the Off-Peak Deliverability Assessment shall not be assigned to any Interconnection Customer in an Interconnection Study report, such costs shall not be considered in determining the cost responsibility or maximum cost responsibility of the Interconnection Customer for Network Upgrades under this GIP or in determining the Interconnection Financial Security than an Interconnection Customer must post under Section 9;
- (iii) and the applicable Participating TO(s) shall not be responsible under this GIP for financing or constructing such transmission upgrades.—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.

any sthey do, then projects for constructing these upgrades may be submitted to the CAISO as merchant transmission projects for consideration under Section 24 of the CAISO Tariff.

* * *

6.7 [GIP item #11] Effect of Phase I Study Cost Form Basis Of Financial Security Estimates on Initial Financial Security Posting and Cost Responsibility

Until such time as the Phase II Interconnection Study report is issued to the Interconnection Customer, tThe 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, as well as the maximum value for each Interconnection Customer's total cost responsibility for Network Upgrades. As set forth in Section 9.5 of this GIP, after issuance of the Phase II Interconnection Study, the Interconnection Customer's Interconnection Financial Security obligations and maximum cost responsibility for Network Upgrades will be based on the lesser of the cost estimates set forth in the Phase I and Phase II Interconnection Studies. [GIP item_#11]. 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 publishissue 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.

[GIP items #2 and addendum #8] The Interconnection Customer may provide comments on the final Phase I Interconnection Study report within ten (10) Business Days of receipt of the report, but in no less than three (3) Business Days before the Results Meeting the report, whichever is sooner. These comments will be addressed in the Phase I Interconnection Study Results Meeting.

[CAISO NOTE: THIS PROVISION HAS BEEN RE-LOCATED TO SECTION 6.9]

6.9 Phase I Interconnection Study Results Meeting

Within thirty (30) calendar days of <u>issuingproviding</u> 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. [GIP item #2] In the Results Meeting, the applicable Participating TO(s) and the CAISO shall address any written comments made by the Interconnection Customer on the final Phase Interconnection Study report pursuant to GIP Section 6.8. 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.

[GIP items #2 and addendum #8] Should the Interconnection Customer provide written comments on the final Phase I Interconnection Study report within ten (10) Business Days of receipt of the report, but in no event less than three (3) Business Days before the Results Meeting conducted to discuss the report, whichever is sooner, the ISO will address the writtenin comments in the Phase I Interconnection Study Results Meeting. Should the Interconnection Customer provide comments at any later time (up to the time of the Results Meeting), then such comments shall be considered informal inquiries to which the CAISO will provide informal, informational responses at the Results Meeting, to the extent possible.

The Interconnection Customer may submit, in writing, additional comments on the final Phase I Interconnection Study report up to (3) Business Days following the Results Meeting. Based on any discussion at the Results Meeting and any comments received, the CAISO and (in consultation with the applicable Participating TO(s)) will determine, in accordance with Section 6.10 of this GIP, whether it is necessary to follow the final Phase I Interconnection Study report with a revised revise study report or issue-an addendum. to the final Phase I Interconnection Study Report. If the CAISO and applicable Participating TO(s) determine that it is necessary to revise the final Phase I Interconnection Study Report, t The CAISO will issue any such the revised report or addendum to the Interconnection Customer no later than fifteen (15) Business Days following the Results Meeting.

* * *

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 publicationissuance 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.

6.9.3 Confirmation of Deliverability Status [GIP item #15]

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 the 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 as follows:

- (a) from Full Capacity Deliverability Status to Energy-Only Deliverability
 Status;
- (b) from Full Capacity Deliverability Status to Partial Deliverability Status with a specified Partial Deliverability level in MW;
- (c) from Partial Deliverability Status to Energy-Only Deliverability Status; or
- (d) reduce the level of Partial Deliverability Status in MW.

6.9.4 Determination of Impact of Modifications Decreasing Generating Capacity Output or Deliverability Status Reductions on Calculation of Initial Financial Security Posting [GIP item #15]

After receiving from the Interconnection Customer any modification elections involving decreases in electrical output (MW) of the Generating Facility and/or changes (i.e., reductions) in deliverability status as permitted in Section 6.9.3 above, the CAISO, in coordination with the applicable Participating TO(s), will determine, based on best engineering judgment, whether such modifications will eliminate the need for any Delivery Network Upgrades identified in the Phase I Interconnection Study report. The CAISO and applicable Participating TO(s) will not conduct any re-studies in making this determination.

If the CAISO and applicable Participating TO(s) should determine that one or more Delivery Network Upgrades identified in the Phase I Interconnection Study are no longer needed, then, solely for purposes of calculating the amount of the Interconnection Customer's initial Financial Security Posting under Section 9.2, such Delivery Network Upgrade(s) will be considered to be removed from the plan of service described in the Interconnection Customer's Phase I Interconnection Study report and the cost estimates

for such upgrades shall not be included in the calculation of Interconnection Financial Security in Section 9.2. The CAISO will inform in a timely manner any Interconnection Customers so affected, and provide the Interconnection Customers with written notice of the revised initial Interconnection Financial Security posting amounts. No determination under this Section 6.9.4 shall affect either (i) the timing for the initial Interconnection Financial Security posting or (ii) the maximum value for the Interconnection Customer's total cost responsibility for Network Upgrades established by the Phase I Interconnection Study report.

6.10 [GIP item #2] Revisions and Addenda to a Final Interconnection Study Report

6.10.1 Substantial Error or Omissions; Revised Study Report

Should the CAISO discover, through written comments submitted by an Interconnection Customer or otherwise, that a final Phase I or Phase II Interconnection Study Report (which can mean a final Phase I or Phase II Interconnection Study Report for cluster studies or a final System Impact or Facilities report for the Independent Study Process) contains a substantial error or omission, the CAISO will cause a revised final report to be issued to the Interconnection Customer. A substantial error or omission shall mean an error or omission that results in one or more of the following:

- (i) understatements of the Interconnection Customer's cost responsibility for either

 Network Upgrades or Participating TO Interconnection Facilities by more than
 five (5) percent or one million dollars (\$1,000,000), whichever is greater; or
- (ii) overstatements of the Interconnection Customer's cost responsibility for either

 Network Upgrades or Participating TO Interconnection Facilities of more than twenty (20) percent; or
- (iii) results in a delay to the schedule by which the Interconnection Customer can achieve Commercial Operation, based on the results of the final Interconnection Study, by more than one year.

A dispute over the plan of service by an Interconnection Customer shall not be considered a substantial error or omission unless the Interconnection Customer demonstrates that the plan of service was based on an invalid or erroneous study assumption that meets the criteria set forth above.

6.10.2 Other Errors or Omissions; Addendum

If an error or omission in an Interconnection Study Report (for either the cluster process or Independent Study Process) is not a substantial error or omission, the CAISO shall not issue a revised final Interconnection Study report, although the error or omission may result in an adjustment of the corresponding Interconnection Financial Security. Rather, the CAISO shall document such error or omission and make any appropriate correction by issuing an addendum to the final report.

The CAISO and applicable Participating TO shall also incorporate, as needed, any corrected information pertinent to the terms or conditions of the GIA in the draft GIA provided to an Interconnection Customer pursuant to Section 11 of this GIP.

6.10.3 Only Substantial Errors or Omissions Adjust Posting Dates

Unless the error or omission is a substantial error resulting in the issuance of a revised final Interconnection Study report, the correction of an error or omission shall not operate to delay any deadline for posting Interconnection Financial Security set forth in Section 9 of this GIP. In the case of a substantial error or omission resulting in the issuance of a revised final Phase I or Phase II Interconnection Study report, the deadline for posting Interconnection Financial Security shall be extended as set forth in GIP Section 9. In addition to issuing a revised final report, the CAISO will promptly notify the Interconnection Customer of any revised posting amount and extended due date occasioned by a substantial error or omission.

An Interconnection Customer's dispute of a CAISO determination that an error or omission in a final Phase I or Phase II Interconnection Study report does not constitute substantial error shall not operate to change the amount of Interconnection Financial Security that the Interconnection Customer must post or to postpone the applicable deadline for the Interconnection Customer to post Interconnection Financial Security. In case of such a dispute, the Interconnection Customer shall post the amount of Interconnection Financial Security in accordance with Section 9 of this GIP, subject to refund in the event that the Interconnection Customer prevails in the dispute.

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 and Operational Deliverability Assessment [GIP item #15]

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. Beginning with Queue Cluster 5, the Phase II Interconnection Study will incorporate eligible Interconnection Requests from the previous Phase I Interconnection Study. 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.

[GIP item #18 and addenda #4 and 5] The CAISO will perform an operational partial and interim Deliverability Assessment (operational Deliverability Assessment) as part of the Phase II Interconnection Study. The operational Deliverability Assessment will be performed for each applicable queue cluster study group for each applicable study year through the prior year before all of the required Delivery Network Upgrades are inservice. The CAISO will consider operational Deliverability Assessment results stated for the first year in the pertinent annual Net Qualifying Capacity process that the CAISO performs for the next Resource Adequacy Compliance Year. The study results for any other years studied in operational Deliverability Assessment will be advisory and provided to the Interconnection Customer for its use only and for informational purposes only.

Modeling based on Commercial Operation Date. The operational Deliverability Assessment will model each Generating Facility based on either (i) the Commercial Operation Date set forth in a GIA executed for the Generating Facility or filed unexecuted with FERC, (ii) the estimated Commercial Operation Date set forth in the latest Interconnection Study report for a Generating Facility for which an Interconnection Study has been completed but for which a GIA has not been executed, (iii) the requested Commercial Operation Date for a Generating Facility in the current queue cluster, or (iv) the adjusted Commercial Operation Date, as applicable. For each Generating Facility, the CAISO will, for purposes of this assessment only, assume a Commercial Operation Date different than the one set forth in the Generating Facility's GIA or latest Interconnection Study report, as applicable, if the CAISO determines that such Commercial Operation Date is infeasible. In making this determination, the CAISO will consider the status and progress of the Interconnection Study or GIA. the Participating TO's estimated time to complete the Interconnection Facilities and Network Upgrades required for the interconnection, and other information provided by the Interconnection Customer. The CAISO will set forth as study assumptions in the study those factors that the CAISO considered in adjusting the Commercial Operation Date for purposes of the study.

- Timing and modeling requirements. The operational Deliverability Assessment will be performed for each future year until the year before all of the required Delivery Network Upgrades are in-service for each applicable study group. The CAISO will consider operational Deliverability Assessment results stated for the first year in the pertinent annual Net Qualifying Capacity process that the CAISO performs for the next Resource Adequacy Compliance Year. The operational Deliverability Assessment results for any other years will be advisory and provided for informational purposes only. For each study year, the operational Deliverability Assessment will model the Generating Facilities in or before the study year and will model Network Upgrade components that are projected to be in-service in or before the study year. Generating Facilities obtaining Full Capacity Deliverability Status under the annual full capacity deliverability option will be placed after the cluster that completes its Phase II Interconnection Study immediately before the annual full capacity deliverability assessment.
- For a Generating Facility that is to be implemented in phases, the operational

 Deliverability Assessment will model the phasing of the Generating Facility. The operational Deliverability Assessment will model all resources, including generation, load, and imports, in accordance with the On-Peak Deliverability Assessment methodology.
- (iii) Method for allocating deliverable partial capacity. If system conditions cannot accommodate the full deliverability of all Generating Units in the applicable study area that will be in Commercial Operation for the study year.

The CAISO will publish the methodology under which the CAISO will perform the operational deliverability assessment on the ISO Website or within a Business Practice Manual.

* * *

7.4 Financing Of Delivery Network Upgrades [GIP item #17]

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 or Partial 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.

Beginning with the Phase II Interconnection Study for Clusters 3 and 4, any transmission upgrades identified in the Off-Peak Deliverability Assessment as part of the Phase II Interconnection Study, and the estimated costs thereof, shall be conceptual in nature only, and therefore, commencing with that study, the estimated costs of transmission upgrades identified in the Off-Peak Deliverability Assessment shall not be assigned to any Interconnection Customers in an Interconnection Study report, such costs shall not be considered in determining the cost responsibility or maximum cost responsibility of the Interconnection Customer for Network Upgrades under this GIP, and the applicable Participating TO(s) shall not be responsible under this GIP for financing or constructing such transmission upgrades.

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 publishissue 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.

[GIP Item #2 and addendum #8] The Interconnection Customer may provide comments on the final Phase II Interconnection Study report within ten (10) Business Days of receipt of the report, but in no case less than three (3) Business Days before the eeting to discuss the report pursuant to Section 7.7 of this GIP, whichever is sooner. These comments will be addressed in theeeting with the CAISO and applicable Participating TO(s).

* * *

7.7 Results 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.

[GIP item #2 and addendum #8] Should the Interconnection Customer provide written comments on the final Phase II Interconnection Study report within ten (10) Business
Days of receipt of the report, but in no case less than three (3) Business Days before the Results Meeting, whichever is sooner, then the ISO will address the written comments in the Phase II Interconnection Study Results Meeting. Should the Interconnection
Customer provide comments at any later time (up to the time of the Results Meeting), then such comments shall be considered informal inquiries to which the CAISO will provide informal, informational responses at the Results Meeting, to the extent possible.

[GIP item#2 and addendum #8] In this eeting, the applicable Participating TO(s) and the CAISO shall address any comments made by the Interconnection Customer on the final Phase II Interconnection Study report pursuant to GIP Section 7.5.

The Interconnection Customer may submit, in writing, additional comments on the final Phase II Interconnection Study report up to three (3) Business Days following the Results Meeting. Based on any discussion at the this Results Meeting and any comments received, the CAISO (in consultation with the applicable and applicable Participating TO(s)) will determine, in accordance with Section 6.10 of this GIP, whether it is necessary to follow to revise or issue an addendum to the final Phase II Interconnection Study Report with a revised study report or an addendum to the report. If The CAISO and applicable Participating TO(s) determine that it is necessary to revise the final Phase II Interconnection Study Report, the CAISO will issue any such the revised report or addendum no later than fifteen (15) Business Days following theis Results Mmeeting.

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8.3 NEEDS TITLE

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 <u>CAISO</u> 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.

8.4 Deliverability Option for Generators Interconnecting to Non-Participating TOs in the CAISO Balancing Authority Area [GIP item #1 and addendum #7]

This process applies to Generating Facilities that interconnect to the transmission facilities of a Non-Participating TO located within the CAISO Balancing Authority Area that wish to obtain Full Capacity Deliverability Status under the CAISO Tariff for the purpose of supplyResource Adequacy capacity to a Load Serving Entity. Such Generating Facilities will be eligible to be studied by the CAISO for Full Capacity Deliverability Status pursuant to the following provisions:

- (a) The Generating Facility seeking Full Capacity Deliverability Status under the CAISO Tariff must submit a request to the CAISO to study it for such Status. Such study request will be in the form of the CAISO's pro forma Interconnection Request, must include the Generating Facility's intended Point of Delivery to the CAISO Controlled Grid, and must be submitted during a Cluster Application Window. The Generating Facility will be required to satisfy the same study deposit and Interconnection Financial Security posting requirements as an Interconnection Customer, but will not be considered an Interconnection Customer under the CAISO Tariff.
- (b) The Non-Participating TO that serves as the interconnection provider to the Generating Facility must treat the CAISO as an Affected System in the interconnection study process for the Generating Facility.
- (c) As part of the Non-Participating TO's interconnection study process, the CAISO, in its sole discretion and on a case-by-case basis, will determine the adequacy of transmission on the Non-Participating TO's system for the Generating Facility to

be deemed fully deliverable to the elected Point of Delivery to the CAISO Controlled Grid. Only those proposed Generating Facilities (or proposed increases in Generating Facility capacity) eustomers for which the CAISO has determined there is adequate transmission capacity on the Non-Participating TO system to provide full deliverability to the applicable Point of Delivery will be eligible to be assessed for Full Capacity Deliverability Status under the CAISO Tariff.

- (d) If the Generating Facility is eligible for study for Full Capacity Deliverability

 Status, the CAISO will include the Generating Facility in the Interconnection

 Study process for the Queue Cluster associated with the Cluster Application

 Window in which the Generating Facility has submitted its study request. The

 Point of Delivery with the CAISO will be treated as the Point of Interconnection

 for purposes of including the Generating Facility in a Group Study with any
 applicable CAISO Interconnection Customers in the relevant Queue Cluster.

 Pursuant to the Queue Cluster Interconnection Study process, as set forth in this
 GIP, the Generating Facility will be allocated its share of any applicable Delivery

 Network Upgrades.
- (e) The CAISO, Participating TO, and Interconnection Customer will execute any necessary agreements for reimbursement of study costs incurred it incurs and to assure cost attribution for any Network Upgrades relating to any deliverability status conferred to each such interconnection customer under the Non-Participating TO's tariff.
- (f) The Non-Participating TO's interconnection customer will receive repayment of funds posted for the construction of the Delivery Network Upgrades on the CAISO Controlled Grid in the same manner as CAISO Interconnection Customers, as specified in GIP Section 12.3.2.

* * *

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. [GIP item #2] The postings set forth in this GIP Section 9.2 shall be made on or before ninety (90) calendar days after publication study 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.

Revised Cluster Study Reports. However, ilf the CAISO revises a final Phase I Interconnection Study report pursuant to GIP Section 6.10, the initial postings set forth in this GIP Section 9.2 will be due from the Interconnection Customer by the later of ninety (90) calendar days after issuance of the original final Phase I Interconnection Study Report or forty (40) calendar days after issuance of the revised final Phase I Interconnection Study Report.

Revised Independent Study Track Reports. If the CAISO revises a final System Impact Study report pursuant to GIP Section 6.10, the initial postings set forth in this GIP Section 9.2 will be due from the Interconnection Customer by the later of ninety (90) calendar

days after issuance of the original final System Impact report or thirty (30) calendar days after issuance of the revised System Impact Study report.

* * *

9.2.4 Posting Amount for Participating TO's Interconnection Facilities.

[GIP item #12]

- 9.2.4.1 For Small Generating Facilities. 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 (15) percent (15%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Participating TO's Interconnection Facilities 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.
- 9.2.4.2 For Large Generating Facilities. 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 (15) percent (15%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Participating TO's Interconnection Facilities, (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.
- 9.2.4.3 Cost Estimates Less than Minimum Posting Amounts. If the costs of the estimated
 Participating TO Interconnection Facilities for either a Small Generating Facility or Large
 Generating Facility are less than the minimum posting amounts that would apply under
 Sections 9.2.4.1 or 9.2.4.2, then the posting amount required will be equal to the
 estimated Participating TO Interconnection Facilities amount.

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.
- 9.2.6 Effect of Decrease in Output on Initial Posting Requirement. If an Interconnection Customer decreases the electrical output of its facility after the completion of the Phase I Interconnection Study, pursuant to Section 6.9.2, and the <u>CAISO</u>, in consultation with the applicable Participating TO(s), is able to reasonably determine, prior to the date for initial posting of Interconnection Financial Security, that as a result of such decrease (solely or

in combination with other modifications made by Interconnection Customers in the same Study Group) some of the Network Upgrades and/or Participating TO Interconnection Facilities identified in the Phase I Interconnection Study will no longer be required, then the calculation of the initial posting of Interconnection Financial Security will not include those Network Upgrades and/or Participating TO Interconnection Facilities. Such determination will be made based on the <u>CAISO</u>'s best engineering judgment and will not include any re-studies.

- 9.3 Additional Posting Of Interconnection Financial Security
- 9.3.1 Second Posting of Interconnection Financial Security.
 - 9.3.1.1 [GIP item #8] 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, except to the extent that the provisions of GIP Section 9.3.3 apply; (ii) a second posting relating to the Participating TO's Interconnection Facilities.
 - 9.3.1.2 Timing of Posting. [GIP item #2] The postings in this GIP Section 9.3.1 shall be made on or before one hundred eighty (180) calendar days after publication issuance 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. However, if the CAISO revises a final Phase II Interconnection Study report pursuant to GIP Section 6.10, the postings set forth in this GIP Section 9.3.1.2 will be due from the Interconnection Customer by the later of one hundred-eighty (180) calendar days after issuance of the original final Phase II Interconnection Study report or sixty (60) calendar days after issuance of the revised final Phase II Interconnection Study report. If the CAISO revises the final Facilities Study report pursuant to GIP Section 6.1, the postings set forth in this Section 9.2 will be due by the later of one hundred-twenty (120) calendar days after the issuance of the original final Facilities Study report or thirty (30) calendar days from the issuance of the revised Facilities Study report.

[GIP item #8] 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 (30) 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, except to the extent that the provisions of GIP Section 9.3.3 apply. 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 (30) 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, except to the extent that the provisions of GIP Section 9.3.3 apply. 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.

[GIP item #12] 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 Participating TO Interconnection Facilities equals the lesser of (i) \$1 million or (ii) thirty (30) 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 Participating TO Interconnection Facilities equals the lesser of (i) \$15 million or (ii) thirty (30) 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 Participating TO Interconnection Facilities are less than the minimum posting amounts set forth above, the posting amount required will be equal to the estimated Participating TO Interconnection Facilities amount.

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 publicationissuance 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 publicationissuance 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 LGIA Article 2.3 or SGIA Article 3.3, whichever is applicable.
- 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. [GIP item #8] With respect to the Interconnection Financial Security Instrument for Network Upgrades, the Interconnection Customer shall modify this Instrument so that it equals one hundred (100) 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, except to the extent that the provisions of GIP Section 9.3.3 apply. 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 (100) 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.

[GIP item #3] If an Interconnection Customer's Network Upgrades and/or Interconnection Facilities are separated into two or more specific components and/or can be separated into two or more separate and discrete phases of construction and the Participating TO is able to identify and separate the costs of the identified discrete components and/or phases of construction, then the Participating TO, the CAISO, and the Interconnection Customer may negotiate, as part of the Generator Interconnection Agreement, a division of the third Interconnection Financial Security posting-of Interconnection Financial Security into discrete smaller Interconnection Financial Security deposit amounts and may establish discrete milestone dates (however, outside dates must be included) dates for posting the amounts corresponding to each discrete component and/or phase of construction related to the Network Upgrades and/or Interconnection Facilities described in the Generator Interconnection Agreement.

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 LGIA Article 2.3 or SGIA Article 3.3, whichever is applicable.

9.3.3 Offsets for Network Upgrades Which Funded by Front Fund.

[GIP item #8] To the extent that the Participating TO unequivocally commits (subject to conditions set forth or to be set forth in a GIA) to up-front fund Network Upgrades for which an Interconnection Customer has been assigned cost responsibility, the Interconnection Customer will be relieved of the obligation to make the second and third postings of Interconnection Financial Security for such Network Upgrades. The Interconnection Customer will remain obligated to make the second and third postings of Interconnection Financial Security for that portion of its assigned Network Upgrades that the Participating TO does not unequivocally (subject to conditions set forth or to be set forth in a GIA) commit to up-front fund.

As a prerequisite for the Participating TO up-front funding commitment to relieve the Interconnection Customer of its posting requirements for the related Network Upgrades, the up-front funding commitment must be conditional upon the Interconnection Customer's meeting milestones for Interconnection Customer development and construction of the Generating Facility as set forth in Appendix B to the LGIA or Attachment 4 to the SGIA, as applicable. Such Interconnection Customer milestones will

include, with respect to the proposed Generating Facility or an identified phase of such facility; as identified in the LGIA, such events as the securing of Site Exclusivity, posting of Financial Security under GIP Section 9 for the Interconnection Customer's cost responsibility for Network Upgrades (exclusive of up-front funded amounts) and for the Participating TO's Interconnection Facilities, securing of necessary permits, licenses, and/or property rights required for the construction, selection of applicable engineering, procurement and construction contractors, securing of necessary financing, and such other commercially reasonable milestones as the Participating TO, CAISO, and Interconnection Customer shall consent and agree to (such consent shall not be unreasonably withheld).

If the Participating TO withdraws its contractual commitment to up-front fund the Network Upgrades the Interconnection Customer will be required to post Interconnection Financial Security covering the Network Upgrades for which the Participating TO is withdrawing its up-front funding, within thirty (30) days of the Participating TO's notice to the Interconnection Customer that the up-front funding is being withdrawn.

If the Interconnection Customer's obligation to make the second posting of Interconnection Financial Security arises before the Generator Interconnection Agreement is executed by all parties to that agreement, the Interconnection Customer will be provided an additional thirty (30) days to post any Interconnection Financial Security related to Participating TO up-front funded Network Upgrades. The Interconnection Customer will continue to engage in good faith efforts to complete the negotiation of the Generator Interconnection Agreement during the additional thirty (30) day period. If the Generator Interconnection Agreement is not executed by all parties to that agreement within the additional thirty (30) day period, the Interconnection Customer will then be required to post the remaining Interconnection Financial Security, subject to refund.

If, after execution of the Generator Interconnection Agreement by all parties to that agreement, the Participating TO has made an up-front Network Upgrade funding commitment that is conditioned on a request for abandoned plant approval pending before FERC, the obligation to post the Interconnection Financial Security for Network Upgrades related to the Participating TO up-front funding commitment will be suspended during the pendency of the request before FERC. If FERC issues an order denying the request for abandoned plant approval, the obligation to post the Interconnection Financial Security for Network Upgrades will immediately be reinstated, and the Interconnection Customer will be required to post the Interconnection Financial Security within forty-five (45) days of the issuance of the FERC order unless the parties to the Generator Interconnection Agreement renegotiate that agreement within the forty-five (45) day period to provide for alternative timeframes or methods for funding the posting. Such a renegotiated Generator Interconnection Agreement will be deemed to be conforming to a FERC-accepted standard form of Generator Interconnection Agreement only if it extends the time period for posting the Interconnection Financial Security to a date no later than seventy-five (75) days after the FERC order denying abandoned plant approval was issued or provides for continued Participating TO up-front funding of the Network Upgrades. If the parties to the Generator Interconnection Agreement are unable to renegotiate and execute the Generator Interconnection Agreement within the forty-five (45) day period, the Interconnection Customer must post the Interconnection Financial Security before the close of such time period.

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.

* * *

- 9.4.2 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 (50) 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.

. . .

9.5 Maximum Cost Responsibility for Financial Security Postings and Network Upgrade Costs [GIP Item #11]

For Interconnection Customers in a Queue Cluster, after the CAISO issues the Phase II Interconnection Study report to the Interconnection Customer, the maximum value for the Financial Security required of each Interconnection Customer and the maximum cost responsibility of each Interconnection Customer for Network Upgrades shall be established by the lesser of the costs for Network Upgrades assigned to the

Interconnection Customer in the final Phase I Interconnection Study report or the final Phase II Interconnection Study report.

For Interconnection Customers in the Independent Study Process, the maximum value for the Interconnection Customer's Financial Security and the maximum cost responsibility for Network Upgrades shall be established by the lesser of the costs for Network Upgrades assigned to the Interconnection Customer in the final System Impact Study report or final Facilities Study report.

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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 GIA set forth in CAISO Tariff Appendix T 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. [GIP item #2] 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 one hundred-twentyninety (12090) 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 one hundred-twentyninety (12090) 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 one hundred-twentyninety (12090) 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.

* * *

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.

[GIP item #14] To the extent that this Section operates to impose requires upon the applicable Participating TO(s) cost responsibility for financing or construct Network Upgrades (which cost responsibility was previously assigned to Interconnection Customer(s) under GIP Section 7.3 and 7.4) the applicable Participating TO(s) to incur costs associated with financing and constructing Network Upgrades in excess of what is those amounts covered by the Interconnection Financial Security posted by such Interconnection Customers, the Participating TO(s) shall be presumed to be eligible.

* * *

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 LGIA Article 12.1 or SGIA Article 6.1, whichever is applicable, 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 LGIA Article 12.1 or SGIA Article 6.1, whichever is applicable, 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 LGIA Article 12.1 or SGIA Article 6.1, whichever is applicable, 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.

[GIP item #14] To the extent that this Section operates to requires impose upon the applicable Participating TO(s) cost responsibility for financing and constructing to fund capital costs for Reliability and Delivery-Network Upgrades (which were previously assigned to Interconnection Customer(s) under GIP Section 7.3 and/or 7.4) because the costs of such Upgrades exceed the total cost responsibility assigned to Interconnection Customer(s) under GIP Section 7.3 and 7.4, in excess of the what is covered by the Interconnection Financial Security posted by such Interconnection Customer(s)), the Participating TO(s) shall be presumed to be eligible, subject to prudency review and any other applicable review by FERC, to include such capital costs not funded by Interconnection Customers in its their TRR(s).

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 [GIP item #6 and addendum #3]

12.3.2.1 Repayment of Amounts Advanced Regarding Non-Phased Generating Facilities

Upon the Commercial Operation Date of a Generating Facility that is not a Phasedthe 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.

12.3.2.2 Repayment of Amounts Advanced Regarding Phased Generating Facilities

<u>Upon the Commercial Operation Date of each phase of a Phased Generating Facility, the Interconnection Customer shall be entitled to a repayment for the Interconnection</u>

<u>Customer's contribution to the cost of Network Upgrades for that completed phase in accordance with the Interconnection Customer's cost responsibility assigned for the phase under GIP Sections 7.3 and 7.4 if all of the following conditions are satisfied:</u>

- (a) The Generating Facility is capable of being constructed in phases;
- (b) The Generating Facility is specified in the GIA as being constructed in phases;
- (c) The completed phase corresponds to one of the phases specified in the GIA;
- (d) The phase has achieved Commercial Operation and the Interconnection

 Customer has tendered notice of the same pursuant to the GIA-that the phase has achieved Commercial Operation;
- (e) All parties to the GIA have confirmed agreed that the completed phase meets the requirements set forth in the GIA and any other operating, metering, and interconnection requirements to permit generation output of the entire capacity of the completed phase as specified in the GIA;
- (f) The Network Upgrades necessary for the completed phase to meet the desired level of deliverability are in service; and
- (g) The Interconnection Customer has posted one hundred (100) percent of the Interconnection Financial Security required for the Network Upgrades for all the phases of the Generating Facility (or if less than one hundred (100) percent has been posted, then all required Interconnection Financial Security instruments to the date of commencement of repayment).

Upon satisfaction of these conditions (a) through (g), the Interconnection Customer shall be entitled to receive a partial repayment of its financed cost responsibility in an amount equal to the percentage of the Generating Facility declared to be in Commercial Operation multiplied by the cost of the Network Upgrades associated with the completed phase. The Interconnection Customer shall be entitled to repayment in this manner for each completed phase until the entire Generating Facility is completed.

A reduction in the electrical output (MW capacity) of the Generating Facility pursuant to Article 5.19.4 of the LGIA shall not diminish the Interconnection Customer's right to repayment pursuant to this GIP Section 12.3.2.2. If the GIA includes a partial termination provision and the partial termination right has been exercised with regard to a phase that has not been built, then the Interconnection Customer's eligibility for repayment under this Section as to the remaining phases shall not be diminished. [If the Interconnection Customer completes one or more phases and then defaults on breaches the GIA, the Participating TO and the CAISO shall be entitled to offset any losses or damages resulting from the default breach against any repayments made for Network Upgrades related to the completed phases provided that the party seeking to exercise the offset has complied with any requirements which may be required to apply the stream of payments utilized to make the repayment to the Interconnection Customer as an offset.]

Any repayment amount for completion of a phase shall include any tax gross-up or other tax-related payments associated with the Network Upgrades not refunded to the Interconnection Customer, and 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 date by which the Interconnection Customer the requirements of items (a) through (g) above have been fulfilled, has tendered notice under the GIA that the phase has achieved Commercial Operation and the Network Upgrades necessary for the phase to meet the

desired level of deliverability have gone into service; or (2) any alternative payment schedule that associates the completion of Network Upgrades with the completion of particular phases and that is mutually agreeable to the Interconnection Customer and Participating TO.

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 for each phase, or portions thereof that were funded by the Interconnection Customer. Such CRRs would take effect upon the Commercial Operation Date of the phase in accordance with the GIA.

12.3.2.3 Interest Payments and Assignment Rights

[CAISO NOTE TO STAKEHOLDERS: THIS NEW GIP SECTION 12.3.2.3 INCLUDES TARIFF PROVISIONS THAT WERE MOVED FROM GIP SECTION 12.3.2.1 TO THIS SECTION.] Any phased or non-phased repayment pursuant to this GIP Section 12.3.2 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.

Appendix 1 Interconnection Request INTERCONNECTION REQUEST

* * *

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

1.	The undersigned Interconnection Customer submits this request to interconnect its Generating Facility with the CAISO Controlled Grid pursuant to the CAISO Tariff (check one):
	Fast Track Process.
	rask rack rocess Independent Study Process.
	Independent Study Frocess. Queue Cluster process.
	One-Time Deliverability Assessment pursuant to GIP Section 8.1.
	Annual Deliverability Assessment pursuant to GIP Section 8.
2	·
2.	This Interconnection 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.	Requested Deliverability Status is for (check one):
	_ Full 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)
	_ Partial Deliverability for MW of electrical output (For Independent Study Process and Queue
	Cluster Process only) [GIP item #15]
	_ Energy Only
	3) -)

- 4. The Interconnection Customer provides the following information:
 - 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;
	num net megawatt electrical output (MW): or egawatt 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);
	Cogeneration (MW) Reciprocating Engine (MW) Biomass (MW) Steam Turbine (MW) Gas Turbine (MW) Wind (MW) Hydro (MW) Photovoltaic (MW) Combined Cycle (MW)
	Other (please describe):
d. Propo	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); sed Trial Operation Date: sed Commercial Operation Date: sed Term of Service (years):
e.	Name, address, telephone number, and e-mail address of the Interconnection Customer's contact person (primary person who will be contacted);
	Name:

DUNS Number:

	f.	Approximate location of the proposed Point of Interconnection (i.e., specify transmission facility interconnection point name, voltage level, and the location of interconnection);
	g.	Interconnection Customer data (set forth in Attachment A)
		The Interconnection Customer shall provide to the CAISO the technical data called for in GIP Appendix 1, Attachment A. Three (3) copies are required.
5.	to CAIS	able deposit amount as specified in the GIP made payable to California ISO. Send check SO (see section 7 for details) along with the: dix 1 to GIP (Interconnection Request) for processing. ment A to Appendix 1 (Interconnection Request Generating Facility Data).
6.		ce of Site Exclusivity as specified in the GIP and name(s), address(es) and contact ation of site owner(s) (check one):
	Depos	ched to this Interconnection Request it in lieu of Site Exclusivity will be provided at a later date in ance with this GIP
7.	This In	terconnection Request shall be submitted to the CAISO representative indicated below:
		New Resource Interconnection California ISO P.O. Box 639014 Folsom, CA 95763-9014 Overnight address: 250 Outcropping Way151 Blue Ravine Road, Folsom, CA 95630
8.	Repres	sentative 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 In	terconnection Request is submitted by:
	Legal	name of the Interconnection Customer:
	By (si	gnature):
	Name	(type or print):
	Title:_	

Date:		
	Date:	

* * *

Attachment A Generating Facility Data To GIP Appendix 1 Interconnection Request

GENERATING FACILITY DATA

* * *

Average Site Elevation:	Single Phase	Three Phase
Field Volts:		
Field Amperes:		
Motoring Power (MW):		
Neutral Grounding Resistor		
122t or K (Heating Time Cor		
Rotor Resistance:		
Stator Resistance:		
Stator Reactance:		
Rotor Reactance: Magnetizing Reactance:		
Short Circuit Reactance:		
Exciting Current:		
Temperature Rise:		
Frame Size:		
Design Letter:		
Reactive Power Required Ir	No Load):	
Reactive Power Required In		
Total Rotating Inertia, H:		00 MVA Base
		ver Systems Load Flow (PSLF) data sl ther data sheets are more appropriate
		discussed at Scoping Meeting.
proposed device then they	shall be provided and o	
proposed device then they some services with the services of t	* * * Based Machines	discussed at Scoping Meeting.
Wind Generators Inverter- Number of generators to be Average Site Elevation:	* * * Based Machines interconnected pursu Single Phase	discussed at Scoping Meeting. ant to this Interconnection Request:
Wind Generators Inverter- Number of generators to be Average Site Elevation:	* * * Based Machines interconnected pursuanterconnected pursuanterconnected pursuanterconnected pursuanterconnected pursuanterconnected pursuanterconnected	discussed at Scoping Meeting. ant to this Interconnection Request: Three Phase to this Interconnection Request:

Field Volts:	<u>=</u>
Field Amperes:	<u>=</u>
Motoring Power (MW):	
Neutral Grounding Resistor (If Ap	oplicable):
I 22t or K (Heating Time Constant	
Rotor Resistance:	<u> </u>
Stator Resistance:	<u>-</u>
Stator Reactance:	
Rotor Reactance:	_ _
Magnetizing Reactance:	<u>-</u>
Short Circuit Reactance:	
Exciting Current:	
Temperature Rise:	
Frame Size:	
Design Letter:	
Reactive Power Required In Vars	s (No Load):
reductive i ower regulied ili vare	
Reactive Power Required In Vars	: (Full Load):

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:

Harmonics Characteristics:

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.

* * *

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

* * *

5. Phase II Interconnection Study

5.1 Phase II Interconnection Study Procedures

The Phase II Interconnection Study, as described in GIP Section 7, for the LGIP Transition Cluster shall commence no later than one hundred twenty (120) calendar days after publication issuance 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.

* * *

6. Interconnection Financial Security

The provisions of GIP Section 9 shall apply to the LGIP Transition Cluster, except that (i) the initial posting of Interconnection Financial Security under GIP 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 issuance 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 GIP 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 GIP Section 9.3 based on the total cost responsibility assigned to the Interconnection Customer for Network Upgrades in the Phase II Interconnection Study.

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 (_____ Ffull Ceapacity,

Partial Deliverability for	MW [GIP item #15], or
Energy only)	_

NOTICE: YOUR CHOICE OF DELIVERABILITY STATUS CAN AFFECT YOUR ABILITY TO QUALIFY
YOUR GENERATING FACILITY AS A RESOURCE ADEQUACY RESOURCE OR AFFECT YOUR
TRANSACTIONS FOR SALE OF POWER. PLEASE GIVE CONSIDERATION TO YOUR CHOICE OF
DELIVERABILITY STATUS

* * *

ATTACHMENT B

CONTACTS FOR NOTICES

[Section 4.15]

California ISO

Manager, Transmission Engineering
250 Outcropping WayBlue Ravine Road

Folsom, CA 95630 Phone: 916.351.2104 Fax: 916.351.2264

[NAME OF PTO]

[Address of PTO]

* * *

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, Partial Deliverability [GIP item #15], or Energy-Only)



CAISO TARIFF APPENDIX CC

Large Generator Interconnection Agreement for Interconnection Requests in a Queue Cluster Window

that are tendered a Large Generator Interconnection Agreement on or after July 3, 2010

* * *

[GIP item #6] Phased Generating Facility shall mean a Generating Facility that is structured to be completed and to achieve Commercial Operation in two or more successive sequences that are specified in this LGIA, such that each sequence comprises a portion of the total megawatt generation capacity of the entire Generating Facility.

* * *

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.

[GIP Item #13]

Network Upgrades common to multiple Generating Facilities, and to which the Interconnection Customer's right of suspension shall not extend, consist of Network Upgrades identified for:

- (i) Generating Facilities which are the subject of all Interconnection Requests made prior to the Interconnection Customer's Interconnection Request;
- (ii) Generating Facilities which are the subject of Interconnection Requests within the Interconnection Customer's queue cluster; and
- (iii) Generating Facilities that are the subject of Interconnection Requests that were made after the Interconnection Customer's Interconnection Request but no later than the date on which the Interconnection Customer's Phase II Study Report is issued, and have been modeled in the Base Case at the time the Interconnection Customer seeks to exercise its suspension rights under this Section.

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 Article 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.

[GIP Item #5 and Addendum #9]

5.19.4 Permitted Reductions in output capacity (MW generating capacity) of the

Generating Facility. An Interconnection Customer may reduce the MW capacity of the Generating Facility by up to five percent (5%) for any reason, during the time period between the Effective Date of this LGIA and the Commercial Operation Date. The five percent (5%) value shall be established by reference to the MW generating capacity as set forth in the "Interconnection Customer's Data Form To Be Provided by the Interconnection Customer Prior to Commencement of the Phase II Interconnection Study" (Appendix B to Appendix 3 of the GIP).

The applicable Participating TO(s) and CAISO (in consultation with the applicable Participating TO(s) will consider an Interconnection Customer's request for a reduction in the MW generating capacity greater than five percent (5%) under limited conditions where the Interconnection Customer reasonably demonstrates to the Participating TO and CAISO that the MW generation capacity reduction is warranted due to reasons beyond the control of the Interconnection Customer. Reasons beyond the control of the Interconnection Customer shall include events in the nature of failure to secure required permits and other governmental approvals to construct the Generating Facility at its full MW generating capacity, if the Interconnection Customer has made diligent efforts to do so. Upon such demonstration to the reasonable satisfaction of the Participating TO and CAISO (after consultation with the applicable the Participating TO) and the CAISO will permit such reduction.

No permitted reduction of MW generation capacity under this Article shall operate to diminish the Interconnection Customer's cost responsibility for Network Upgrades or to diminish the Interconnection Customer's right to repayment for financing of Network Upgrades under this LGIA.

* * *

11.4.1 Repayment of Amounts Advanced for Network Upgrades. [GIP item #6 and addendum #3]

11.4.1.1 Repayment of Amounts Advanced Regarding Non-Phased Generating Facilities

Upon the Commercial Operation Date of a Generating Facility that is not a Phased Generating Facility, and the in-service date of the corresponding Network Upgrades, 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.

11.4.1.2 Repayment of Amounts Advanced Regarding Phased Generating Facilities

Upon the Commercial Operation Date of each phase of a Phased Generating Facility, the Interconnection Customer shall be entitled to a repayment equal to the Interconnection Customer's contribution to the cost of Network Upgrades for that completed phase for which the Interconnection Customer is responsible, as set forth in Appendix G, if all of the following conditions are satisfied:

- (a) The Generating Facility is capable of being constructed in phases;
- (b) The Generating Facility is specified in the LGIA as being constructed in phases;
- (c) The completed phase corresponds to one of the phases specified in the LGIA;
- (d) The phase has achieved Commercial Operation and the Interconnection

 Customer has tendered notice of the same pursuant to thise LGIA-that the phase has achieved Commercial Operation;
- (e) All parties to the LGIA have confirmed agreed that the completed phase meets the requirements set forth in thise LGIA and any other operating, metering, and interconnection requirements to permit generation output of the entire capacity of the completed phase as specified in thise LGIA;
- (f) The Network Upgrades necessary for the completed phase to meet the desired level of deliverability are in service; and
- (g) The Interconnection Customer has posted one hundred (100) percent of the Interconnection Financial Security required for the Network Upgrades for all the phases of the Generating Facility (or if less than one hundred (100) percent has been posted, then all required Financial Security Instruments to the date of commencement of repayment).

Upon satisfaction of these conditions (a) through (g), the Interconnection Customer shall be entitled to receive a partial repayment of its financed cost responsibility in an amount equal to the percentage of the Generating Facility declared to be in Commercial Operation multiplied by the cost of the Network Upgrades associated with the completed phase. The Interconnection Customer shall be entitled to repayment in this manner for each completed phase until the entire Generating Facility is completed.

A reduction in the electrical output (MW capacity) of the Generating Facility pursuant to LGIA Article 5.19.4 shall not diminish the Interconnection Customer's right to repayment pursuant to this LGIA Article 11.4.1. If the LGIA includes a partial termination provision and the partial termination right has been exercised with regard to a phase that has not been built, then the Interconnection Customer's eligibility for repayment under this Article as to the remaining phases shall not be diminished. [If the Interconnection Customer completes one or more phases and then breaches the LGIA, the Participating TO and the CAISO shall be entitled to offset any losses or damages resulting from the breach against any repayments made for Network Upgrades related to the completed phases.]

Any repayment amount for completion of a phase 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 dDate by which the requirements of items (a) through (g) have been fulfilled; 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.

11.4.1.3 Interest Payments and Assignment Rights

Any <u>phased or non-phased</u> 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.

11.4.1.4 Failure to Achieve Commercial Operation

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.

* * *

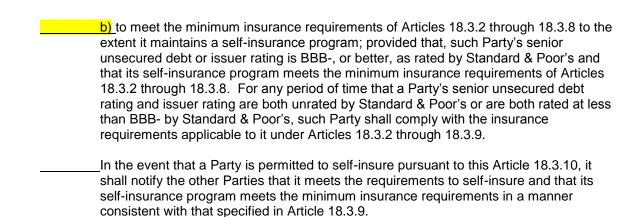
- **18.3** Insurance. [GIP item #9] Each As indicated below, the designated Party shall, at its own expense, maintain in force throughout the periods noted inef this LGIA, and until released by the other Parties, the following minimum insurance coverages, with insurers rated no less than A-(with a minimum 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 any insurance required to be carried by the CAISO, the State of California:
 - 18.3.1 Employer's Liability and Workers' Compensation Insurance. The Participating TO and the Interconnection Customer shall maintain such coverage from the commencement of any Construction Activities providing statutory benefits for workers compensation coverage and coverage amounts of no less than One Million Dollars (\$1,000,000) for employer's liability 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. The Participating TO shall provide the Interconnection Customer with evidence of such insurance within thirty (30) days of any request by the Interconnection Customer. The Interconnection Customer shall provide evidence of such insurance thirty (30) days prior to entry by any employee or contractor or other person acting on the Interconnection Customer's behalf onto any construction site to perform any work related to the Interconnection Facilities or Generating Facility., which shall list the Participating TO as an additional insured.
 - 18.3.2 Commercial General Liability Insurance. The Participating TO and the Interconnection Customer shall maintain general commercial general liability insurance commencing within thirty (30) days of the effective date of this LGIA, 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. If the activities of the Interconnection Customer are being conducted through the actions of an Affiliate, then the Interconnection Customer may satisfy the insurance requirements of this Section 18.3.2 by providing evidence of insurance coverage carried by such Affiliate and showing the Participating TO as an additional insured, together with the Interconnection Customer's written representation to the Participating TO and the CAISO that the insured Affiliate is conducting all of the necessary preconstruction work. Within thirty (30) days prior to the entry of any person on behalf of the Interconnection Customer onto any construction site to perform work related to the Interconnection Facilities or Generating Facility, the Interconnection Customer shall replace any evidence of Affiliate Insurance with evidence of such insurance carried by the Interconnection Customer, naming the Participating TO as additional insured.

- 18.3.3 Business Automobile Liability Insurance. Prior to the entry of any such vehicles on any construction site in connection with work done by or on behalf of the Interconnection Customer, the Interconnection Customer shall provide evidence of 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. Upon the request of the Participating TO, the Interconnection Customer shall name the Participating TO as an additional insured on any such policies.
- 18.3.4 Excess Public Liability Insurance. Commencing at the time of entry of any person on its behalf upon any construction site for the Network Upgrades, Interconnection Facilities, or Generating Facility, the Participating TO and the Interconnection Customer shall maintain 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. Such insurance carried by the Participating TO shall name the Interconnection Customer as an additional insured, and such insurance carried by the Interconnection Customer shall name the Participating TO as an additional insured.
- 18.3.5 The Commercial General Liability Insurance, Business Automobile Insurance and Excess Public Liability Insurance policies shall name the other Parties identified in the sections above, 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 the anniversary date of cancellation or any material change in coverage or condition. If any Party can reasonably demonstrate that coverage policies containing provisions for insurer waiver of subrogation rights, or advance written notice are not commercially available, then the Parties shall meet and confer and mutually determine to (i) establish replacement or equivalent terms in lieu of subrogation or notice or (ii) waive the requirements that coverage(s) include such subrogation provision or require advance written notice from such insurers.

18.3.10 Notwithstanding the foregoing, each Party may self-insure

a) to meet the insurance requirements of Article 18.3.1, to the extent that it maintains a self-insurance program that is a qualified self insurer within the state in which the Point of Interconnection is located, under the laws and regulations of such state; and



* * *

Appendix T

Small Generator Interconnection Agreement

* * *

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 [GIP item #6 and addendum #3]

5.3.1.1 Repayment of Amounts Advanced Regarding Non-Phased Generating Facilities

Upon the Commercial Operation Date of a Generating Facility that is not a Phased Generating Facility, 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-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 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.

5.3.1.2 Repayment of Amounts Advanced Regarding Phased Generating Facilities

<u>Upon the Commercial Operation Date of each phase of a Phased Generating Facility, the</u> Interconnection Customer shall be entitled to a repayment equal to the amount paid to the Participating TO for the cost of Network Upgrades for that completed phase for which the Interconnection Customer is responsible, if all of the following conditions are satisfied:

- (a) The Generating Facility is capable of being constructed in phases:
- (b) The Generating Facility is specified in the SGIA as being constructed in phases;
- (c) The completed phase corresponds to one of the phases specified in the SGIA;
- (d) The Interconnection Customer has tendered notice pursuant to the SGIA that the phase has achieved Commercial Operation;
- (e) All parties to the SGIA have agreed that the completed phase meets the requirements set forth in the SGIA and any other operating, metering, and interconnection requirements to permit generation output of the entire capacity of the completed phase as specified in the SGIA;
- (f) The Network Upgrades necessary for the completed phase to meet the desired level of deliverability are in service; and
- (g) The Interconnection Customer has posted one hundred (100) percent of the Interconnection Financial Security required for the Network Upgrades for all the phases of the Generating Facility.

Upon satisfaction of these conditions (a) through (g), the Interconnection Customer shall be entitled to receive a partial repayment of its financed cost responsibility in an amount equal to the percentage of the Generating Facility declared to be in Commercial Operation multiplied by the cost of the Network Upgrades associated with the completed phase. The Interconnection Customer shall be entitled to repayment in this manner for each completed phase until the entire Generating Facility is completed.

If the SGIA includes a partial termination provision and the partial termination right has been exercised with regard to a phase that has not been built, then the Interconnection Customer's eligibility for repayment under this Article as to the remaining phases shall not be diminished. If the Interconnection Customer completes one or more phases and then defaults on the SGIA, the Participating TO and the CAISO shall be entitled to offset any losses or damages resulting from the default against any repayments made for Network Upgrades related to the completed phases, provided that the party seeking to exercise the offset has complied with any requirements which may be required to apply the stream of payments utilized to make the repayment to the Interconnection Customer as an offset.

Any repayment amount for completion of a phase 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-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 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.

5.3.1.3 Interest Payments and Assignment Rights

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.

5.3.1.4 Failure to Achieve Commercial Operation

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.

* * *

[GIP item #6] Phased Generating Facility – A Generating Facility that is structured to be completed and to achieve Commercial Operation in two or more successive sequences that are specified in this SGIA, such that each sequence comprises a portion of the total megawatt generation capacity of the entire Generating Facility.

* * *

Attachment 7

[GIP Item #16]INTERCONNECTION REQUIREMENTS FOR A-WINDAN ASYNCHRONOUS GENERATING PLANTFACILITY

Attachment 7 sets forth requirements and provisions specific to a <u>wind generating plant.all Asynchronous Generating Facilities.</u> All other requirements of this Agreement continue to apply to <u>wind generating plantAsynchronous Generating Facility</u> interconnections.

A. Technical Standards Applicable to a Wind Generating Plant Asynchronous Generating Facilities

i. Low Voltage Ride-Through (LVRT) Capability

An Asynchronous Generating Facility 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. An Asynchronous Generating Facility shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the requirements below.

- 1. An Asynchronous Generating Facility shall remain online for the voltage disturbance caused by any fault on the transmission grid, or within the Asynchronous Generating Facility between the Point of Interconnection and the high voltage terminals of the Asynchronous Generating Facility's step up transformer, having a duration equal to the lesser of the normal three-phase fault clearing time (4-9 cycles) or one-hundred fifty (150) milliseconds, plus any subsequent post-fault voltage recovery to the final steady-state post-fault voltage. Clearing time shall be based on the maximum normal clearing time associated with any three-phase fault location that reduces the voltage at the Asynchronous Generating Facility's Point of Interconnection to 0.2 per-unit of nominal voltage or less, independent of any fault current contribution from the Asynchronous Generating Facility.
- 2. An Asynchronous Generating Facility shall remain online for any voltage disturbance caused by a single-phase fault on the transmission grid, or within the Asynchronous Generating Facility between the Point of Interconnection and the high voltage terminals of the Asynchronous Generating Facility's step up transformer, with delayed clearing, plus any subsequent post-fault voltage recovery to the final steady-state post-fault voltage. Clearing time shall be based on the maximum backup clearing time associated with a single point of failure (protection or breaker failure) for any single-phase fault location that reduces any phase-to-ground or phase-to-phase voltage at the Asynchronous Generating Facility's Point of Interconnection to 0.2 per-unit of nominal voltage or less, independent of any fault current contribution from the Asynchronous Generating Facility.
- 3. Remaining on-line shall be defined as continuous connection between the Point of Interconnection and the Asynchronous Generating Facility's units, without any mechanical isolation. Asynchronous Generating Facilities may cease to inject current into the transmission grid during a fault.
- 4. The Asynchronous Generating Facility is not required to remain on line during multi-phased faults exceeding the duration described in Section A.i.1 of this Appendix H or single-phase faults exceeding the duration described in Section A.i.2 of this Appendix H.
- 5. The requirements of this Section A.i. of this Appendix H do not apply to faults that occur between the Asynchronous Generating Facility's terminals and the high side of the step-up transformer to the high-voltage transmission system.

- 6. Asynchronous Generating Facilities may be tripped after the fault period if this action is intended as part of a special protection system.
- 7. Asynchronous Generating Facilities may meet the requirements of this Section A.i of this Appendix H through the performance of the generating units or by installing additional equipment within the Asynchronous Generating Facility, or by a combination of generating unit performance and additional equipment.
- 8. The provisions of this Section A.i of this Appendix H apply only if the voltage at the Point of Interconnection has remained within the range of 0.9 and 1.10 per-unit of nominal voltage for the preceding two seconds, excluding any sub-cycle transient deviations.

Transition Period LVRT Standard

The transition period standard applies to wind generating plant Asynchronous Generating Facilities 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 Asynchronous Generating Facilities 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.
- 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.
- 1. Wind generating plants Asynchronous Generating Facilities may be tripped after the fault period if this action is intended as part of a special protection system.
- 1. Wind generating plants Asynchronous Generating Facilities 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.
- 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 <u>Asynchronous Generating Facilities</u> not covered by the transition period described above must meet the following requirements:

1. Wind generating plants Asynchronous Generating Facilities 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.
- 1. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU.
- 1. Wind generating plants Asynchronous Generating Facilities may be tripped after the fault period if this action is intended as part of a special protection system.
- 1. Wind generating plants Asynchronous Generating Facilities 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.
- 1. 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. Frequency Disturbance Ride-Through Capacity

An Asynchronous Generating Facility shall comply with the off nominal frequency requirements set forth in the WECC Under Frequency Load Shedding Relay Application Guide or successor requirements as they may be amended from time to time.

iii. Power Factor Design Criteria and Operating Requirements (Reactive Power)

An Asynchronous Generating Facility 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 SLGIA 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 Asynchronous Generating Facility is in operation.

Asynchronous Generating Facilities 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

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.

ivii. Supervisory Control and Data Acquisition (SCADA) and Automated Dispatch System (ADS) Capability

An Asynchronous Generating Facility 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 Asynchronous Generating Facility Interconnection Customer shall determine what SCADA information is essential for the proposed Asynchronous Generating Facility, taking into account the size of the plant and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability.

iv. Power System Stabilizers (PSS)

Power system stabilizers are not required for Asynchronous Generating Facilities.

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.

* * *

24.4.6.5 LGIP Network Upgrades

Beginning with the 2011/2012 planning cycle, Network Upgrades originally identified during the Phase II Interconnection Study or Interconnection Facilities Study Process of the Large Generation Interconnection Process as set forth in Section 7 of Appendix Y that are not already included in a signed LGIA may be assessed as part of the comprehensive Transmission Plan if these Network Upgrades satisfy the following criteria:

- (a) The Network Upgrades consist of new transmission lines 200 kV or above, and have capital costs of \$100 million or greater;
- (b) The Network Upgrade is a new 500 kV substation that has capital costs of \$100 million or greater; or,
- (c) The Network Upgrades have a capital cost of \$200 million or more.

The CAISO will post a list of the Network Upgrades eligible for assessment in the Transmission Planning Process in accordance with the schedule set forth in the applicable Business Practice Manual. Network Upgrades included in the comprehensive Transmission Plan may include additional components not included in the Network Upgrades originally identified during the Phase II Interconnection Study or may be expansions of the Network Upgrades originally identified during the Phase II Interconnection Study if the CAISO determines during the Transmission Planning Process that such components or expansions are needed as additional elements under section 24.1. Network Upgrades identified in the LGIP Phase II studies but not assessed in the Transmission Planning Process will be included in Large Generator Interconnection Agreements, as appropriate. Network Upgrades assessed in the Transmission Planning Process but not modified or replaced will be included in Large Generator Interconnection Agreements, as appropriate. Construction and ownership of Network Upgrades specified in the comprehensive Transmission Plan under this section, including any needed additional components or expansions, will be the responsibility of the Participating TO if the Phase II studies identified the original upgrade as needed and such upgrade has not yet been set forth in an executed Large Generator Interconnection Agreement.

[GIP Item #14] To the extent that additional components or expansions to Network Upgrades remain the

responsibility of the Participating TO and such Network Upgrades are subsequently abandoned, the Participating TO shall be presumed to be eligible, subject to prudency and any other applicable review by FERC, to include in its TRR the costs of such Network Upgrades if the costs attributable to the abandonment of such Network Upgrades (as modified, replaced or otherwise reconfigured in the Transmission Planning Process) exceed the amounts funded by Interconnection Customers pursuant to Appendix Y. This presumption shall not apply in the case of Network Upgrades which the applicable Participating TO agreed to up-front fund independent of any obligation to fund pursuant to the Transmission Planning Process. If, through the Transmission Planning Process, the CAISO identifies any additional components or expansions of Network Upgrades that result in the need for other upgrades or additions, the responsibility to build and own such additions or upgrades will be determined by this Section 24, according to the category of those other upgrades or additions. Any decision in the Transmission Planning Process to modify Network Upgrades identified in the Large Generator Interconnection Process will not increase the cost responsibility of the Interconnection Customer as described in Appendix Y, Section 7. Category 1 policy-driven elements identified under Section 24.4.6.7 could supplant the need for LGIP Network Upgrades that would be developed in subsequent Generator Interconnection Process cycles. To the extent that a Category 1 policy-driven element eliminates or downsizes the need for a Network Upgrade, the Interconnection Customer's cost responsibility for such Network Upgrade shall be eliminated or reduced. Any financial security posting shall be adjusted accordingly.

* * *

25. Interconnection Of Generating Units And Facilities

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 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;- and
- (e) [GIP Item #7, under the heading "Path 2"] each existing Generating Unit that is a Qualifying Facility and that is converting to a Participating Generator without repowering or reconfiguring the existing Generating Unit, subject to Section 25.1.2.

[GIP Item #7, under the heading "Path 1"] The CAISO and/or the applicable Participating TO shall be authorized to verify whether the requirements of Section 25.1(b), -(c), -(d), and -(e) apply to each existing Generating Unit, and the owner of the existing Generating Unit, or its designee, shall be responsible for any costs related to that verification process pursuant to the Business Practice Manual. The CAISO may engage the services of the applicable Participating TO in the ISO's conducting such verification activities, in which case such costs shall be borne by the such party making the request under Section 25.1, and such costs shall be included in any CAISO invoice for verification activities.

* * *

25.1.2 Affidavit Requirement

[GIP #7, under the heading "Path 2"] If the owner of a Generating Unit described in Section 25.1(d) or -(e), or its designee, represents that the total capability and electrical characteristics of the Generating Unit 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 Generating Unit will remain substantially unchanged. If there is any change to the total capability and

electrical characteristics of the Generating Unit, 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 Generating Unit have changed or will change.

* * *

37.9.4 Disposition Of Proceeds

The CAISO shall collect penalties assessed pursuant to this Section 37.9 and deposit such amounts in an interest bearing trust account. After the end of each calendar year, the CAISO shall distribute the penalty amounts together with interest earned through payments to Scheduling Coordinators as provided herein. For the purpose of this Section 37.9.4, "eligible Market Participants" shall be those Market Participants that were not assessed a financial penalty pursuant to this Section 37 during the calendar year. Each Scheduling Coordinator that paid GMC during the calendar year will identify, in a manner to be specified by the CAISO, the amount of GMC paid by each Market Participant for whom that Scheduling Coordinator provided service during that calendar year. The total amount assigned to all Market Participants served by that Scheduling Coordinator in such calendar year (including the Scheduling Coordinator itself for services provided on its own behalf), shall equal the total GMC paid by that Scheduling Coordinator.

The CAISO will calculate the payment due each Scheduling Coordinator based on the lesser of the GMC actually paid by all eligible Market Participants represented by that Scheduling Coordinator, or the product of a) the amount in the trust account, including interest, and b) the ratio of the GMC paid by each Scheduling Coordinator for eligible Market Participants, to the total of such amounts paid by all Scheduling Coordinators. Each Scheduling Coordinator is responsible for distributing payments to the eligible Market Participants it represented in proportion to GMC collected from each eligible Market Participant.

Prior to allocating the penalty proceeds, the CAISO will obtain FERC's approval of its determination of eligible Market Participants and their respective shares of the trust account proceeds. **[GIP Item #2]** If the total amount in the trust account to be so allocated exceeds the total GMC obligation of all eligible Market Participants, then such excess shall be treated in accordance with Section 11.29.9.6.38.5.3(b).

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Attachment H List of Key Dates in the Stakeholder Process

ATTACHMENT G

<u>List of Key Dates in Stakeholder Process for</u> <u>Generator Interconnection Procedures (GIP) Phase 2</u>

Date	Event/Due Date
February 24, 2011	CAISO issues paper entitled "Issue Paper – Generator
	Interconnection Procedures Phase 2"
March 3, 2011	CAISO hosts stakeholder meeting that includes
	discussion of paper issued on February 24 and other GIP
	Phase 2 matters
March 11, 2011	Due date for written stakeholder comments on paper
	issued on February 24
March 15, 2011	Meetings of GIP Phase 2 Work Groups 2 and 3
March 16, 2011	Meeting of GIP Phase 2 Work Group 4
March 17, 2011	Meeting of GIP Phase 2 Work Group 5
March 18, 2011	Meeting of GIP Phase 2 Work Group 1
March 21, 2011	CAISO issues paper entitled "Issue Ranking Paper –
	Generator Interconnection Procedures Phase 2"
April 14, 2011	CAISO issues paper entitled "Straw Proposal – Generator
	Interconnection Procedures Phase 2"
April 28, 2011	CAISO hosts stakeholder meeting that includes
	discussion of paper issued on April 14 and other GIP
	Phase 2 matters
May 5, 2011	Due date for written stakeholder comments on paper
11 0 0044	issued on April 14
May 9, 2011	Meetings of GIP Phase 2 Work Groups 3 and 4
May 12, 2011	Meeting of GIP Phase 2 Work Group 1
May 13, 2011	Meetings of GIP Phase 2 Work Groups 2 and 5
May 27, 2011	CAISO issues paper entitled "Draft Final Proposal –
1 0 . 0044	Generator Interconnection Procedures Phase 2"
June 3, 2011	CAISO hosts stakeholder meeting that includes
	discussion of paper issued on May 27 and other GIP
lune 40, 0044	Phase 2 matters
June 10, 2011	Due date for written stakeholder comments on paper
luno 14 2011	issued on May 27
June 14, 2011	Meeting of GIP Phase 2 Work Group 3
June 15, 2011	Meeting of GIP Phase 2 Work Group 5
June 17, 2011	Meeting of GIP Phase 2 Work Group 2
June 30, 2011	CAISO issues paper entitled "Revised Draft Final
	Proposal – Generator Interconnection Procedures Phase 2"
July 7, 2011	CAISO hosts stakeholder meeting that includes
July 1, 2011	discussion of paper issued on June 30 and other GIP
	Phase 2 matters
	i nace z matters

Date	Event/Due Date
July 14, 2011	Due date for written stakeholder comments on paper
	issued on June 30
July 22, 2011	CAISO issues paper entitled "Addendum to June 30, 2011
	Revised Draft Final Proposal – Generator Interconnection
	Procedures Phase 2"
July 29, 2011	CAISO hosts stakeholder conference call to discuss paper
	issued on July 22
September 30, 2011	CAISO issues draft tariff language to implement GIP
	Phase 2 and accompanying "Table of GIP Phase 2
	Changes"
October 7, 2011	Due date for written stakeholder comments on draft tariff
	language to implement GIP Phase 2 issued on September
	30
October 12-13, 2011	CAISO hosts stakeholder conference calls to discuss draft
	tariff language to implement GIP Phase 2 issued on
	September 30
November 2, 2011	CAISO issues revised draft tariff language to implement
	GIP Phase 2 and paper entitled "Guide to ISO Revisions
	to Draft GIP Phase 2 Tariff Amendment Language"