



California ISO
Shaping a Renewed Future

Revised Draft Final Proposal

Generator Interconnection Procedures Phase 2 (“GIP 2”)

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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 CPUC's 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 ISO's 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.

- 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.¹ 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:

1. 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.

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.

⁴ The 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.⁷ 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

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	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

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;
3. 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;
8. Reduction in project size for permitting or other extenuating circumstances;
9. 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

("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

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 a 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.

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.⁹ 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

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.
2. 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.

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

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 turn-around 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 be 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 be 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

- (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'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'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.

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

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:

1. 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.

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 multi-phased 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 pro forma 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

¹⁴ Palo Verde II, LLC at 134 FERC ¶ 61,087 and Palen Solar, II at 134 FERC ¶ 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 facilities 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 responsibility for its network upgrades, as determined by the GIP Phase 2 cluster study	Multiplied by	MW capacity of the terminated portion of the facility
		MW capacity of the entire 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 MW	Generation in the queue	Multiplier
50	600	10.0%
100	550	18.2%
150	600	25.0%
300	900	33.3%
400	700	57.3 % Not 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

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 where 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.
6. All parties to the LGIA must be in agreement that each phase requesting commercial operation status meets the obligations set 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

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.

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

Documentation reasonably demonstrating:

(1) For private land:

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

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

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

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.
 - b. 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.

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 pre-established operational limitations that eliminate those impacts. The stakeholder behind-the-meter 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.aiso.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.²¹ 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.

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.²² 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:

1. 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-

²⁵ In general, there are two types of basic workers' compensation coverage:

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.

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 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

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 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.

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 queues 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.

²⁷

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

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 in-service. 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 in-service 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 commencement 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>.