



California ISO
Shaping a Renewed Future

Straw Proposal

Generator Interconnection Procedures Phase 2

April 14, 2011
Market and Infrastructure Development

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1. Introduction

With this document, the California ISO (“ISO”) sets out its proposed scope and substantive straw proposals for its Generator Interconnection Procedures Phase 2 (“GIP 2”) stakeholder process to develop further enhancements to its Generation Interconnection Procedures.

This 2011 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”).¹ 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 liberalized than the Federal Energy Regulatory Commission (“FERC”) 2006 SGIP and is 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.²
- Second, the ISO’s revised transmission planning process (“RTPP”) (filed with FERC in June 2010 and conditionally accepted on December 16, 2010)³ 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”)⁴ over the past few months with interconnection customers (“ICs”) and 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 ISO has selected 24 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 two tracks for resolution through this initiative: (1) ISO’s Business Practice

¹ 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.

² The GIP draft final proposal is posted on the ISO website at <http://www.caiso.com/27d9/27d91299c74670.pdf>.

³ 133FERC¶61,224 FERC Order on RTPP

⁴ 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.

Manual Change Management process for inclusion in Business Practice Manuals (“BPM”), or (2) presentation to the ISO Board of Governors at the August 24-25 Board of Governors meeting, for approval as a proposed GIP 2 amendment to ISO Tariff Appendix Y, followed by a tariff filing in time to obtain a FERC order in early December 2011.

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 will be much more efficient and consistent than incorporating similar non-conforming LGIA provisions in multiple LGIAs. Second, it will provide much greater certainty 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.

Accordingly, the ISO is proposing a GIP 2 scope that includes topics that were identified in the 2010 GIP initiative as highest priority and those committed to in the context of the RTPP that will be needed for LGIAs negotiated later this year, or were adopted based on stakeholder requests. Section 3 of this straw proposal presents a list of the topics proposed to comprise the scope of the GIP-2 initiative. Section 4 provides a summary of stakeholder comments received from the issue paper. Section 5 provides the ISO’s substantive straw proposals for the items included in the scope of GIP 2.

The scope of topics was arrived at from comments received from the issue paper and during work group meetings. The ISO will work with stakeholders following the publication of the straw proposal to develop each straw proposal more fully, in order to bring as many before the Board on August 24-25. The ISO recognizes that some of the topics will not be ready to go to the Board in August 24-25, in which case those topics will be continued into the next GIP stakeholder initiative in 2012.

It is important to understand that failure to resolve a topic in time for an August Board decision 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 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. These industry changes are being triggered by several factors, most notably California’s aggressive renewable portfolio standards, greater performance capabilities and commercial viability of emerging technologies, and the incentives and stimuli offered by the federal ARRA.⁵

The ISO has been focused on interconnection reform and revision for some 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.⁶ 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.⁷

⁵ <http://www.energy.gov/recovery/>

⁶ *Order Conditionally Approving Tariff Amendment* 124FERC¶61,292 (September 26, 2008) (generator interconnection reform tariff amendment to study projects in clusters)

⁷ 132FERC¶61,132 FERC Order on waiver of tariff provisions

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 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.

2. Proposed Stakeholder Process and Next Steps

The ISO's timeline below outlines the anticipated stakeholder process timeline for 2011. The items in red ink 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 | 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 final draft 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 section, this straw proposal offers the ISO's proposed scope of the GIP-2 initiative. The immediate next steps, then, are for stakeholders to consider the proposal as well as the detailed descriptions and to offer comments both in the discussion at the April 28 meeting and in written form by May 5. 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 its revised draft final proposal for release on May 27.

In addition to the three remaining stakeholder meetings, the ISO intends to continue work group efforts to assist with GIP development. These work groups, along with the ISO employee leads, are listed below;

- Work Group 1 - GIP Cost Assessment Provisions Lorenzo Kristov, Lead
- Work Group 2 - LGIP Queue and Study Process - Bob Emmert, Lead
- Work Group 3 - LGIP Non-Conforming Provisions, Grandfathered Resources and Site Exclusivity - Bruce McAllister & Grant Rosenblum Leads
- Work Group 4 - LGIP/LGIA Interconnection Cost and Security Requirements - Bill Di Capo Lead
- Work Group 5 - LGIP Technical Assessments - Songzhe Zhu, Lead

Due to the compressed nature of the upcoming schedule, work groups will have limited opportunities to schedule meetings and stakeholders may not be able to attend all meetings. If someone elects to participate in a work group, the ISO expects that person to attend the meetings and participate in development efforts to include:

- Writing assignments
- Research and development of solution options
- Presentation at stakeholder meetings

Moving forward, stakeholders are asked to send an e-mail to the ISO stating the work group or work groups that they would like to participate in.

Prior to the April 28 stakeholder meeting, the ISO will post a template for stakeholders to use to submit their written comments by May 5. The template will provide a means to provide comments on each item in this straw proposal.

3. Topics to be included in GIP 2

This section lists the topics that will be considered as being in the scope of GIP 2 and taken to the Board on August 24-25. This list originally included 19 items; three were taken out and will be deferred to a future initiative, and new ones were included based on stakeholder feedback in the issue paper and in work group meetings. The list is now divided into 24 topics that the ISO proposes be considered as topics to be included in GIP 2. The ISO requests that stakeholders provide input to the ISO, using the posted stakeholder comments template to provide your thoughts on each of the 24 proposals.

The ISO proposes the following topics for the scope of this GIP 2 initiative. More detailed descriptions of these topics are provided in section 4 below.

1. Develop procedures and tariff provisions for economic test of network upgrades to enable the ISO to avoid imposing high GIP-related upgrade costs on ratepayers when

the benefits do not justify the costs, and to provide incentives to ICs to choose efficient interconnection locations;

2. Clarify IC cost and credit requirements when associated GIP network upgrades are reassessed and modified in the transmission planning process (per the new revised TPP provisions);
3. PTO per-unit cost estimation and methodology for estimating costs of network upgrades and PTO interconnection facilities;
4. Generators interconnecting to non-PTO facilities in the ISO BAA;
5. Triggers for Financial Security Posting Deadlines;
6. Clarify definitions of start of construction and other transmission construction phases, and specify posting requirements at each milestone;
7. Improve process for interconnection customers to be notified of their required amounts for Interconnection Financial Security posting
8. Clarify ISO information provision to assist ICs;
9. Provisions for partial termination of an LGIA or when permitting difficulties hinder a project reaching its studied amount;
10. Reduction in project size for permitting or other extenuating circumstances
11. Repayment of IC funding for network upgrades associated with a phased generation facility;
12. Clarify site exclusivity requirements for projects located on federal lands;
13. Interconnection Refinements to Accommodate QF conversions, Repowering and other Special Circumstances Associated with Smaller Projects
14. Behind the meter expansion
15. Specify appropriate security posting requirements where the PTO elects to upfront fund network upgrades;
16. 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;
17. Standardize the use of adjusted versus non-adjusted dollar amounts in LGIAs – currently different conventions are used by the different PTOs;
18. Clarify the Interconnection Customers financial responsibility cap and maximum cost responsibility
19. Consider adding a “posting cap” to the PTO's Interconnection Facilities
20. Partial deliverability as an interconnection option
21. 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
22. Revisit tariff requirement for off-peak deliverability assessment.
23. Annual updating of ISO's advisory course for partial deliverability assessment
24. CPUC Renewable Auction Mechanism requirement for projects to be in an interconnection queue to qualify

4. Comments on the Issue Paper

The ISO released its GIP 2 Issue paper on February 24. Comments on the issue paper were due March 11. 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 issue paper: BAMx (“Bay Area Municipal Transmission Group”), Calpine, CalWEA (“California Wind Energy Association”), LSA (“Large-scale Solar Association”), Clean Coalition, Energy Producers and Users Coalition, Cogeneration Association of California, CPUC (“California Public Utilities Commission”), ECE (“Eagle Crest Energy”), First Solar, Invenergy, IREC (“Interstate Renewable Energy Council”), M-S-R Public Power Agency, NextERA, Ormat, PG&E (“Pacific Gas & Electric”), Pio Pico Energy Center, Recurrent Energy, SCE (“Southern California Edison”), SDG&E (“San Diego Gas & Electric”), Sempra Generation and Six Cities.⁸

4.1. Work Group 1 comments - Cost Assessment Provisions

Stakeholder input: For the economic test evaluation of network upgrades, several stakeholders⁹ suggested deferring this to a later process as it would detract from more urgent “nuts and bolts” topics. Eagle Crest argued the Load Serving Entities (“LSEs”) already perform this type of analysis and through the use of Power Purchase Agreements (“PPAs”) provide a check and balance against uneconomic transmission investments. Sempra and Pio Pico noted any cost-benefit assessment must be transparent and clearly understood by stakeholders. Some stakeholders¹⁰ were clearly in favor of including this topic. Six Cities states this is the single most important topic for consideration and SDG&E believes a cost-benefit analysis will ensure Delivery Network Upgrades will provide value to ratepayers. SCE and PG&E noted they were willing to consider discussing this topic with stakeholders. Most stakeholders agreed that the ISO should add clarity to how network upgrades are considered in the transmission planning process. Energy Producers noted that tariff section 24.4.6.5 should continue to guarantee that modifications to GIP network upgrades will not increase a customer’s cost responsibility.

ISO Response - Although some stakeholders objected to the economic test topic taking time away from discussion into other topics – other stakeholders noted this was a very important item. The ISO has placed this topic in a work group with only one other item and does not expect discussions to detract from other issues.

4.2. Work Group 2 comments - Queue and Study Process

Stakeholder Input: Stakeholders supported including all the topics for work group two in the GIP 2 stakeholder efforts, and some stakeholders not only suggested additional topics, but went on to provide substantive comments on the issue paper topics, for consideration as possible solutions. For the PTO per-unit cost estimates topic, Clean Coalition, Eagle Crest, First Solar

⁸ The ISO notes that CalWEA expressed that its organization represented some 34 members and that this fact should be considered in the weighting. The ISO responded in its March stakeholder conference call meeting that the ISO had not used the weighting as any sort of strict formula in determining what issues would be in the initial scoping effort, but rather as a general guideline.

⁹ Calpine, NextERA, Clean Coalition, Eagle Crest, First Solar, Recurrent Energy, Ormat, CalWEA, LSA

¹⁰ SDG&E, Six Cities, BAMx, M-S-R Public Power Agency

and Recurrent Energy all supported more clarity and consistency among PTO's to approximate cost drivers. SDG&E noted cost estimates may be high due to a lack of detailed engineering and environment information. PG&E and SCE both support transparency and are willing to listen to the concerns of stakeholders. For triggers for IFS ("Interconnection Financial Security") stakeholders¹¹ were unison in adding greater clarity when final posting amounts change as a result of study modifications in between Phase 1 and Phase 2 studies. Recurrent Energy adds that the ISO should further base the second IFS posting deadline of the GIA execution instead of the Phase 2 study issuance. They also suggested adding clarifying the differences in posting amounts that could occur between the Phase 2 study report and GIA execution. Similar to the triggers, stakeholders also supported clarifying start of construction and other transmission construction phases. First Solar noted in comments the ISO should not require postings for construction until final permits to construct that upgrade are obtained. Although stakeholders provided few comments on the Information provided by the ISO, CalWEA, LSA and Pio Pico noted clarifying non-confidential information and maps to assist customers with favorable siting locations was important. Stakeholders provided few comments for generators interconnecting to non-PTO facilities. PG&E, CalWEA and LSA noted clarification would help as more and more of these types connect to the grid.

ISO Response: Many of the suggested topics noted by stakeholders were incorporated into proposals for work group 2. Stakeholders¹² asked for greater scrutiny and transparency for how Participating Transmission Owners assess cost estimates and the ISO has included this in the proposal. Numerous stakeholders, including a proposal sent in by LSA asked the ISO to consider refining the study process before and after the Phase 2 study reports are posted. They asked for a draft Phase 2 process where the customer has an opportunity to review and confirm results. The ISO has included these suggestions into the proposal below.

4.3. Work Group 3 comments – Non-Conforming Provisions

Stakeholder Input. Stakeholders were supportive of the ISO proposing to incorporate partial termination provisions into conforming LGIAs as well as the phasing of security associated with partial termination provisions. NextERA adds that appropriately sizing projects and ensuring the partial termination charge does not overly penalize is important. First Solar, Recurrent and Sempra also support and suggest the ISO also allow customers the flexibility to downsize due to land, permitting and other issues. SDG&E warns that allowing the phasing structure could cause unrealistic upgrades for projects lower in the queue. They suggest the ISO should also consider these projects should be considered under separate agreements. SCE and PG&E both support with PG&E noting the transmission owner should also have protections afforded under the LGIA. Stakeholders¹³ were also supportive of the ISO reviewing how resources transitioning from long term PPAs to the wholesale market could do so and still preserve deliverability. NextERA recommends these types of facilities to be automatically eligible for the independent study process and establish a means to account for a lack of interconnection documentation. PG&E states the current provisions are adequate. Stakeholders provided few comments for clarifying site exclusivity but were supportive for the ISO to reflect changes in Bureau of Land Management siting procedures.

¹¹ Calpine, NextERA, Energy Producers and Users Coalition, Cogeneration Association of California, Eagle Crest, Recurrent Energy, CalWEA, LSA

¹² NextERA, Clean Coalition, Eagle Crest Energy, First Solar, Recurrent Energy

¹³ Energy Producers and Users Coalition, Cogeneration Association of California, First Solar, Ormat, SDG&E, Pio Pico

ISO Response Several stakeholders commented on the need to reduce a projects size if unanticipated permitting obstacles made it difficult to complete the project as originally designed. In response to these concerns and the LSA submitted proposal, the ISO has proposed a means for projects to reduce the size of their project under limited conditions. Many stakeholders supported the ISO addressing behind the meter expansion and conversion of existing QF resources to commercial status. CalWEA and Ormat filed a proposal to the ISO to addressing both of these issues. The ISO has used much of the text provided by these two companies in the proposal.

4.4. Work Group 4 comments - Interconnection Cost and Security Requirements

Stakeholder Input: Stakeholders were supportive of revamping interconnection security posting requirements of network upgrades that the Participating TO has committed to up front fund. Recurrent Energy stated support for this approach. First Solar and Invenergy were supportive but cautioned that generators should be held to meeting milestone dates in lieu of posting security¹⁴. PG&E stated the release from the obligation to make security posting requirements should only occur if the Participating TO believes that the risk of project failure has been addressed through abandoned plant recovery assurances from FERC¹⁵. SCE views this topic

¹⁴ The ISO notes that in the cases those specific cases of Participating TO up-front funding which have been reduced to LGIAs, the LGIA has included specific milestone dates for the interconnection customer to meet as a condition of continued up front funding by the Participating TO throughout the course of construction of the transmission facilities.

¹⁵ The ISO offers the following high level discussion of the interplay of abandoned plant approval and interconnection LGIAs:

The abandoned plant approval mechanism permits the Participating TO to apply to FERC to recover costs if all or part of the transmission facility construction and associated costs are incurred because the transmission facility work of improvement is “abandoned.” (no longer required). The mechanism is intended to protect the Participating TO (i.e. its shareholders) from bearing the risk for sunk or irrevocably committed costs. The Participating TO typically seeks a FERC determination that the abandoned plant approval mechanism will be available to it before any work is undertaken. Then if some LGIA project terminations occur, the Participating TO applies to FERC for recovery of specific cost elements that it could not avoid incurring. FERC then determines whether the costs were “prudently incurred” and awards recovery for those costs as an implementation of its earlier determination that abandoned plant recovery for the transmission upgrades was appropriate. The funding amount that FERC awards is paid from the ISO’s transmission access charge (TAC) as an element of the Participating TO’s transmission revenue requirement that it draws from the TAC. If there are additional or other elements of termination (termination costs) that the Continued - Participating TO has incurred and that were not recovered through abandoned plant approval, the Participating TO seeks recourse from the terminating interconnection customer under the LGIA. In FERC’s orders addressing initial Participating TO requests that FERC determine that abandoned plant approval should be granted with respect to a specific transmission facility construction project, FERC has required that the associated LGIAs contain a term that Participating TO shall not seek recovery under the LGIA from the interconnection customer for any termination cost item that FERC has permitted the Participating TO to recover under the abandoned plant approval mechanism (as this would result in a double recovery for a single cost item).

To date, the ISO’s experience with Participating TO up front funding under the cluster process has only been with respect to up-front funding commitments by SCE. SCE has included up-front funding as a condition to its commitment to fund in the LGIA, but has handled its petition to FERC for abandoned plant approval separately from the ISO. The ISO has taken a neutral position on whether the Participating TO should be granted abandoned plant approval or not, as the ISO views this as a rate-issue.

as high priority, given scenarios where it is not clear when security can be liquidated or if there are timing issues with posting amounts and construction schedules.

Stakeholders did not provide many comments for the ISO revising insurance requirements but were supportive. Some stakeholders, particularly Wellhead, stated that the timing of IC insurance requirements should be reviewed as well, because some of the timing requirements may require particular types of insurance from the IC sooner than necessary.

Stakeholders were divided on the issue of whether existing generating facility sponsors who sought an increase in MW capacity or conversion from a “grandfathered” facility (such as a QF) should be relieved of the second posting requirement for any upgrades. Some support was expressed for differential treatment of repowering projects, but no party suggested such reform was vital to the success of an interconnection for a repowering project.

In general, stakeholders universally supported adopting a uniform approach for the PTO’s to calculate cost estimates and posting amounts, so as to avoid different practices across the different Participating TO’s (where some would use adjusted dollars and others would not).¹⁶

ISO Response: The ISO has placed all but the third item (refinements to posting requirements for “grandfathered” facilities) in scope, and the ISO has included the items in the straw proposal below. The ISO has also incorporated Wellhead’s suggestion to adjust IC insurance requirements as well as ISO insurance requirements.

4.5. Work Group 5 comments – Technical Assessments

Stakeholder Input. Stakeholders supported the ISO revising LGIP technical assessments and partial and off-peak deliverability and provided many recommendations. Calpine asserts partial deliverability would benefit both the interconnection customer and rate payers. Calpine notes one problem is that while the current GIP allows for the customer to request partial deliverability without the highest cost upgrade, it does not allow for the customer to take that partial deliverability. NextERA on the other hand does not see value in providing a resource partial deliverability because more realistic capacity values can be provided with a greater emphasis on the study process. First Solar, CalWEA and LSA also recommend the ISO reevaluate the study process for off-peak deliverability and reduce the conservative assumptions identified in the studies. Recurrent notes the ISO should continue to provide off-peak deliverability assessments but allow generators to decide whether or not to finance upgrades in order to receive deliverability. PG&E believes the off-peak deliverability assessment should be discontinued for purposes of determining an NQC for resource adequacy counting purposes but is necessary to give some assurance for deliverability under a PPA.

ISO Response: In work group 5, stakeholders were primarily interested in off-peak and partial deliverability. The ISO has proposed several options to allow customers to make changes from Full Capacity Deliverability to Energy Only status as well as an additional option to reduce the level of deliverability. The ISO also plans to continue with the off-peak deliverability assessment in concert with stakeholder recommendations.

¹⁶ For example, Ormat, Sempra, SDG&E, PG&E, CalWEA, LSA, and NextERA expressed support in written comments. No stakeholder voiced support in meetings differing practices among the Participating TOs.

4.6. Additional comments provided by stakeholders

In addition to the topics that the ISO proposed in the Issue Paper, stakeholders provided comments on additional items to include within the scope of GIP 2. Many stakeholders¹⁷ commented on the need to improve the Independent Study Process and Fast Track mechanisms. The ISO has addressed some of these questions below, but the ISO is not convinced that it is feasible to further shorten the cluster study process time beyond the shortened time period that was placed in the GIP last year. The current process has been through a rigorous stakeholder process and was vetted by ISO and PTO engineers and stakeholders with transmission engineering expertise, and the consensus at that time was that there wasn't any way to shorten the process without compromising the quality of the study reports. In this regard, it is the judgment of ISO engineers that the 15% of peak load screen for Fast Track is the most flexibility the ISO can conservatively allow without having to conduct a more thorough study process.

Some stakeholders noted that deliverability results should be updated very frequently so that, if additional capacity is "freed up" because an earlier queued project has dropped out of the queue, the deliverability for the lower queued projects could "benefit from additional deliverability earlier than the completion of their corresponding delivery network upgrades. This expectation may exceed what is possible. However, the ISO went to a cluster study approach to avoid this problem—under the cluster approach the level of analysis for generation additions to trigger upgrades is no longer the individual project level, but rather, the cluster level. Cost allocation concerns were raised by many stakeholders and they are addressed in work group 1. Some stakeholders also asked that the Commercial Operation Deadline be removed the ISP eligibility requirements. The ISO maintains this requirement is an important tool to determine eligibility for the ISP otherwise the customer could follow the cluster study process. Many stakeholders also renewed their request from last year that the ISO develop transmission maps to help locate sites favorable to development. The ISO has added this to the list in work group 2.

One stakeholder concern related to the circumstances outlining the responsibility to return security if network upgrades could not be built by the PTO. The ISO stated in work group meetings that this is a basic tenet of commercial law and need not be embedded into the ISO tariff. In this regard, at the LGIA stage, when the Participating TO holds the security for purposes of securing the IC's contract obligation for the specified network upgrades, the security can only be held as long as the IC has a legal obligation to pay for network upgrades, and if the contractual obligation ceases because the construction work is cancelled, the Participating TO is required to return the unused portion security. Another expressed stakeholder concern related to circumstances regarding "unilateral Point of Interconnection changes" during the interconnection study process, and a request for provisions stating that the customer be given additional time to post security deposits in such a circumstance. The ISO does not believe it necessary to address this topic in GIP 2. Changes to the POI can occur if the IC, PTO and ISO agree that such changes will benefit the cost and benefits of the interconnection (consent not to be unreasonably withheld), and, in such circumstances extension of the posting date does not follow because the IC has agreed to the changed POI.¹⁸

¹⁷ Clean Coalition, NextERA, CPUC,

¹⁸ <http://www.caiso.com/2b53/2b53950f1cf40.pdf> Section 6.9.2.2

Many stakeholders asked to have more optionality between the Phase 1 and Phase 2 process, and the ISO has considered this concern in work group 2. Stakeholder also requested the ISO evaluate older projects in the queue to ensure they were not unduly affecting the deliverability of higher queued projects. The ISO has initiated a process to review and analyze projects in the queue to ensure they are meeting milestones, CODs and other contract terms.

4.7. Stakeholder Participation

The following stakeholders also provided the ISO with a proposal and a clarification on scope following the work group meetings. A brief summary of each is included along with how the ISO used the material in the straw proposal. The full text of each submission is included as an addendum to the straw proposal.

Susan Schneider on behalf of LSA

For the LSA clarification on scope, each topic is listed with an explanation of the status.

- Draft Phase 2 study – Included in scope for work group 2 under section 5.2.3,
- Clarify IC option to build different facilities – Not included in straw proposal (deferred to future GIP initiative)
- Modification of project size – Included in scope for work group 3 under section 5.3.1
- Deliverability vs. CODs – Included in scope for work group 5 under section 5.4.4
- Temporary partial deliverability – Included in scope for work group 5 under section 5.5.1
- Queue-clearing procedures – Not included in straw proposal (being addressed by ISO staff)
- IFS Release & Study Deposit Refund- Not included in straw proposal (this is addressed in the modification section in the LGIA which requires a multi-party agreement to change the point of interconnection)
- IFS Release for PTO failure to build Network Upgrades – Included in scope for work group 2 under section 5.2.3

Ellen Berman on behalf of LSA

LSA's proposal on the timing of financial security postings includes a number of items that the ISO had included in its straw proposal. Those items include providing a draft Phase I & II study results reports to the IC for comment prior to the report's completion, and defining a material or substantial report error or omission. Items not included in the ISO straw proposal was the option where if a majority of projects in a queue cluster's geographical region agree that an error omission has not been resolved then these projects may vote to delay the posting date for the financial security posting until there is a resolution of an alleged error or omission.

Kristin Burford on behalf of LSA

The LSA proposal provides for the flexibility to reduce the size of an interconnection project following Phase 2 study results if permitting obstacles prevent the project from meeting the stated amount. LSA requested the size reduction to be the lesser of 20% or 50 MW. The ISO incorporated some of the selection criteria and modified others and selected 5% and 25MW as the brightline threshold.

Tim Lindl on behalf of CAC/EPUC

The CAC/EPUC proposal calls for the ability to ease the restrictions on generators repowering by raising the ceiling on the Fast Track from 5 MW to 20 MW and to remove the COD deadline. The ISO is proposing changes to allow the Fast Track to apply to repowering but is keeping the 5 MW threshold. The ISO is also proposing changes to allow behind-the-meter generation to increase capacity without going through a rigorous interconnection process under certain conditions. The removal of the COD deadline is not being considered as this is a basic principle used to ensure projects meet milestones dates.

Dariush Shirmohammadi on behalf of CalWEA

Many of the principles outlined to address the CAC/EPUC proposal also apply the CalWEA proposal. The CalWEA proposal outlines greater flexibility to allow a generator to expand without submitting a formal interconnection request or getting back into the queue. These modifications would allow the IC to request expansion without exceeding the Generation Interconnection Agreement capacity ("GIAC") under certain conditions. Many of the business and technical criteria were incorporated with some modifications.

Phillip Muller on behalf of Ormat

The Ormat proposal seeks to allow generators converting from a Qualifying Facility ("QF") status to a Participating Generator Agreement ("PGA") status to maintain deliverability under four different scenarios. These scenarios entail allowing historical deliveries as a mechanism to prove deliverability as part of the affidavit process. Ormat also proposed to allow generators that are repowering to increase capacity but not asking for deliverability to be studied under the ISP process. The ISO has included this as well as Ormat's Study Process to further define the path a generator would take to use the ISP.

Gary Holdsworth for SCE

SCE has developed a straw proposal to further the written comments that SCE submitted on the issue paper and be responsive to the commitment SCE made during the March 16 work group 4 conference call to flesh out its concerns and provide a proposal. The SCE proposal outlines several topics, some of which are related to ones in the straw proposal. SCE would like to discuss modifying the Plan of Service when Phase 2 network upgrade costs are higher than the Phase 1 costs which could lead to PTOs paying for upgrades that cannot be allocated to the rate base. SCE is also concerned that generation projects dropping out of the queue or when suspension rights are exercised could cause the PTOs to finance portions of transmission upgrades without certain cost recovery processes. SCE's proposal is to evaluate these instances in a post-Phase II process and remove, if necessary, upgrades associated with the withdrawn generation. SCE also proposes tariff changes to seek pre-approved abandoned plant recovery. They assert the 'routine' nature of upfront financing caused by the Transmission Planning Process ("TPP") and cost cap provisions could create an additional burden at FERC requesting abandoned plant approval. Lastly, they would like the suspension provisions removed from the Generation Interconnection Agreement ("GIA") as this could cause delays and uncertainty building transmission for non-suspending entities.

5. GIP-2 Straw Proposals

This section presents the ISO's straw proposals for the 24 GIP 2 topics listed above, listed by work group.

5.1. Work Group 1 – GIP Cost Assessment Provisions

The two topics that comprise this work group represent a continuation of the effort begun last year to better integrate the 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 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. (This feature of the TPP is the stimulus for the second of the two topics taken up by Work Group 1 of the GIP 2 initiative, discussed below.)
- 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 two 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 for these two topics, 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.

5.1.1. Economic test for network upgrades

In its 2006 compliance with FERC Order 2003, the ISO proposed an economic test for LGIP network upgrades to enable the ISO to determine whether or not to approve and how to allocate the costs of high-cost upgrades where the benefits to ratepayers are relatively small. In its order on the ISO's filing FERC rejected the proposed economic test on the grounds that the ISO did not provide sufficient details for the Commission to evaluate it. FERC's rejection was "without prejudice," meaning that the ISO could resubmit, and FERC would consider, an economic test as an amendment to the LGIP at a later time based on the ISO's provision of additional details and specificity. Importantly, FERC's order did not indicate any fundamental disagreement with the need for or appropriateness of an economic test.¹⁹ At that time, however, the ISO did not follow up and resubmit an economic test for FERC approval.

The ISO's current straw proposal on this topic does not follow the structure of the economic test proposed in 2006. At that time, the ISO proposed to limit ratepayer exposure to potentially excessive GIP-driven network upgrade costs by setting a cap on the costs ratepayers would reimburse to the IC and requiring the IC to be responsible for costs above the cap. The ISO and the stakeholders did not, at that time, anticipate the new drivers of change described above and the need to integrate the GIP more closely with the TPP. But now, in view of the impacts of the state's environmental policies and the reforms completed thus far, the ISO believes that more is needed than simply to renew the 2006 proposal concept and try to improve it to address the concerns FERC expressed in its order rejecting that proposal. Instead, to create a GIP and TPP framework that can meet the requirements of the new context, this straw proposal starts with a description of a potential end-state built upon effective integration between the GIP and the TPP and a comprehensive approach to planning new transmission infrastructure.

Obviously, the description of an end-state process leaves unanswered many questions about how to specify the transition to that end state. This straw proposal does not try to address transition questions because such questions – like many other near-term topics in the GIP-2 scope – are best addressed when there is a reasonably clear sense of the destination toward which this initiative is headed. The ISO fully intends to take up transition questions later in this GIP 2 initiative.

The proposed end-state framework can be summarized in the following high-level concepts, followed by a more detailed discussion of some key steps and some questions that the ISO will be raising for discussion with stakeholders. This framework is clearly a work in progress, as befits the intent of a straw proposal. Most of what is described in the first few steps below is already specified under the new TPP (section 24 of the ISO tariff), but is summarized here to provide the planning context for the additional GIP-TPP integration provisions described in the later steps.

1. Efficiency in planning new transmission infrastructure will be achieved by identifying and approving new transmission primarily through the TPP, and much less through the GIP than is done today. This change will rely on using the public policy-driven category to its fullest benefit, based on the recognition that the chain of causality runs from (a) the environmental policy mandate (i.e., 33% RPS) to (b) the development of potentially hundreds of renewable resource projects representing thousands of MW of capacity, to (c) the need to upgrade the transmission system to accommodate the energy output of

¹⁹ See Order Accepting in Part and Rejecting in Part Order Nos. 2003,2003-A, and 2003-B Compliance Filings, California Independent System Operator Corporation 112 FERC ¶ 61,009 at P 102-115 (July 1, 2005).

these resources. Thus, whether one views the driver to be the interconnection requests of the new resources (b), or the underlying public policy (a), the implication is still (c).

2. A crucial step in the new integrated process is the formulation of the resource portfolios that are anticipated, since the identification and approval of policy-driven transmission under the new TPP is driven by the need to enable these portfolios to deliver energy to meet the 33% RPS for load-serving entities (LSEs) within the ISO BAA. Several potentially feasible resource portfolios are formulated at this stage, to reflect the many uncertainties about how the pattern of resource development will unfold over the next decade. For purposes of this straw proposal we will not discuss the formulation of resource portfolios in any detail – that topic will be discussed with stakeholders in the context of the 2011/2012 TPP. For now, suffice it to say that this will necessarily involve collaboration of the ISO with the CPUC and potentially other regulatory authorities that govern procurement by their jurisdictional LSEs. The need for such collaboration was evident during the RTPP stakeholder initiative last year, prompting the ISO and CPUC to develop and sign a memorandum of understanding (MOU)²⁰ regarding their collaboration in transmission planning, including the development of resource portfolios.
3. The ISO then begins a multi-month process to develop its annual comprehensive transmission plan. Early in the process of developing the plan, the GIP will complete a Phase 2 study for the current interconnection clusters, identifying the required reliability network upgrades and, for ICs that elected full capacity status, the required deliverability upgrades. The TPP will review the results of the GIP cluster study to assess whether there are more cost-effective ways to upgrade the grid to meet the needs of these ICs and also address other transmission needs. Currently the TPP tariff provides for TPP review of GIP-driven upgrades only when they meet certain thresholds of significant size or cost, but for the end state it may be appropriate to review all GIP-driven network upgrades in the TPP to look more comprehensively for cost-effective alternatives. This modification will also be important for the cost-allocation policy changes suggested in a subsequent step discussed below.

In addition, it will be important to examine whether any revisions to one or more of the resource portfolios is warranted based on the cluster study results. There is a need for such feedback from the GIP cluster studies to the portfolio specification because, as the CPUC staff has noted in their comments in the present initiative, the costs of upgrades will ultimately be passed to ratepayers and should therefore be a factor in procurement decisions. Thus the resource portfolios

4. The plan may include both Category 1 and Category 2 policy-driven transmission elements. This two-category construct is based on having multiple resource portfolios representing potentially feasible patterns of resource development leading to achieving the 33% RPS by 2020. Under this construct, Category 1 policy-driven elements will go to the ISO Board for approval in the current cycle, while Category 2 will be carried over to the next TPP cycle for reconsideration in light of new information about the actual pattern of resource development. The point of creating these two categories is to allow the TPP to balance the competing objectives of developing enough transmission in the right places by the time it is needed to achieve the 33% RPS mandate, and not over-building transmission and causing ratepayers to bear the cost of under-utilized facilities.
5. At the point where the ISO has completed the necessary studies for the current TPP cycle and is putting all the results together to formulate the draft comprehensive plan

²⁰ The MOU is available at <http://www.caiso.com/2799/2799bf542ee60.pdf>

(typically right before the turn of a new calendar year), the planners will assess the extent to which transmission they will recommend for approval obviates the need for some GIP-driven upgrades. Because GIP upgrades will typically be driven by a cluster or an electrically-related subset of a cluster of ICs, any such upgrades that are obviated by transmission plan elements would tend to be needed to serve all ICs within that subset rather than only specific resources within the subset. Also, because policy-driven elements in the plan will typically be designed to achieve the given policy objective efficiently and not to provide much excess capacity (e.g., to achieve 33% RPS but not 40%, unless the state formally adopts a higher target), the ISO expects that plan elements will not obviate all of the network upgrades identified in the GIP cluster studies, unless all of the resources in the cluster are included in enough of the resource portfolios to drive sufficient policy elements in the plan. Thus the ISO expects that in general the comprehensive plan will meet the reliability and potentially the deliverability needs of some portion but not all of the capacity represented by ICs in the current cluster.

6. Once the planners have completed the assessment described in the previous step, the comprehensive transmission plan would essentially subsume – i.e., move from the GIP-driven category into the transmission plan itself – the network upgrades that are needed to achieve the 33% RPS, in accordance with the Category 1 policy-driven criteria in the TPP tariff. Once the Board approves the plan, these network upgrades would be built as rate-based transmission under the TPP without further requirements on the ICs in the cluster to fund them. In this way, this end-state structure can achieve the objective of building more transmission under the TPP and less under the GIP in the future. Note that this concept appears to reinforce the idea raised above, that the TPP not be limited to reassessing only the most significant GIP-driven network upgrades, but should be able to reassess all network upgrades that are identified in completed GIP Phase 2 cluster studies and not yet committed to in an executed LGIA.
7. As noted earlier, the TPP may not lead to the approval of all network upgrades identified in the GIP cluster study, and to the extent that the cluster contains more MW and more generation projects than needed to meet the policy mandate, the TPP may not be able to discriminate among ICs within the cluster as to which ones should be relieved of the obligation to fund or securitize network upgrades and which ones should not. Rather, the policy-driven criteria will typically address the transmission needs of resources located in specific geographic or electrical areas of the grid without distinguishing which specific resources will ultimately utilize that transmission. Indeed, the concept behind the use of multiple resource portfolios to identify Category 1 and Category 2 policy-driven elements is to support a “least regrets” approach so that the approved transmission will be highly utilized under a number of alternative, feasible patterns of future resource development.
8. Given the previous considerations, the question remains as to how to treat the network upgrades for cluster capacity in excess of what is needed to meet the policy mandate, and particularly for ICs that do not figure in enough of the resource portfolios to meet the criteria for policy-driven transmission to be included in the comprehensive plan. The general concept the ISO proposes for consideration is that the costs of such upgrades should be the responsibility of the ICs and should not be fully reimbursed by ratepayers. Obviously this blanket statement invites numerous “but what if” questions, and so to flesh out the proposal more fully it will be helpful to consider several scenarios. Through all of these scenarios is it important to keep in mind that where network upgrades are not approved for ratepayer funding, a developer has the option to build the needed network upgrades at its own expense and to receive “merchant” congestion revenue rights (CRRs) for the incremental capacity it adds to the ISO grid.

The ISO suggests the following scenarios to initiate the discussion, and invites stakeholders to identify other scenarios they believe are relevant to this topic.

- a. Scenario 1 is the situation where an IC wants to interconnect to the ISO grid at a location where there is insufficient potential or commercial interest to warrant including the IC in the 33% RPS resource portfolios. Pursuant to the objective of providing incentives for ICs to pick efficient locations to interconnect, the ISO would propose that this IC's network upgrades should be paid for by the IC and not be refunded by ratepayers.
- b. Scenario 2 is where an electrically related study group (a subset of a cluster) contains more MW of capacity than are included in the 33% RPS resource portfolios to justify approving policy-driven upgrades, and therefore the comprehensive plan approves upgrades to meet the needs of only a portion of those MW. In this case the ISO proposes that the ICs in the study group pay shares of the cost differential between the upgrades approved in the TPP and the upgrades identified in the GIP Phase 2 study to meet the needs of the entire study group, with each IC's share proportional to its MW capacity, adjusted for its deliverability status, and that these costs would not be reimbursed by ratepayers.

5.1.2. Clarify IC cost and credit requirements when GIP network upgrades are modified in the TPP

Under the TPP, GIP-driven network upgrades may be re-evaluated for beneficial expansion of capacity or other enhancements beyond what is required by the GIP cluster studies. The question was raised in the context of the ISO's 2010 RTPP proposal and deferred to GIP 2 as to how any such modification of GIP network upgrades would affect the funding and credit requirements for the IC.

Tariff section 24.4.6.5 sets forth a process by which network upgrades that are identified in the GIP Phase II studies may be assessed in the TPP. The tariff describes the possible outcomes of the ISO's assessment: (1) the network upgrades that are not modified or expanded will proceed through the GIP process to inclusion in an LGIA; (2) network upgrades that are modified or expanded in the TPP and included in the comprehensive transmission plan will be constructed and owned by the participating TO if the original network upgrades "would have been included in an LGIA"; and (3) if network upgrade expansions result in the need for other upgrades and additions, the responsibility to construct and own the upgrades or additions will depend on the category of the needed elements.

Under these possible scenarios the IC's security posting amounts could change. Section 24.4.6.5 states that any modifications to LGIP network upgrades resulting from the TPP would not increase an IC's cost responsibility, and that to the extent a Category 1 policy-driven transmission element eliminates or downsizes the need for a network upgrade the IC's cost responsibility will be eliminated or reduced, respectively. That is the extent of the existing tariff provisions on this topic, however. The task now is to consider additional scenarios for how the TPP could modify GIP network upgrades and how the IC's cost responsibility should be affected in each scenario.

The discussion in the previous section addresses this matter to a substantial degree. First, in the proposed end-state design, the TPP would reassess all GIP-driven network upgrades identified in completed GIP Phase 2 cluster studies and not yet committed to in executed LGIAs,

not just the significant upgrades according to the current tariff criteria. Next, based on this assessment in conjunction with identifying policy-driven transmission elements based on the 33% RPS resource portfolios, the comprehensive plan would subsume those GIP-network upgrades needed to meet the 33% RPS mandate, propose the plan for Board approval for rate-based funding, and upon Board approval relieve the associated ICs of any cost responsibilities for those upgrades.

For situations where the comprehensive plan does not approve all the GIP network upgrades needed for the total resource capacity within a cluster or an electrically related study group within a cluster, and for situations where the IC in question is in a less promising area and thus fails to be included in the resource portfolios used in the TPP, the ICs would be responsible for funding their allocated shares of needed upgrade costs in excess of the costs approved in the comprehensive transmission plan, without reimbursement of these costs by ratepayers, and would be eligible for merchant CRRs for the incremental capacity they add to the ISO grid at their own expense.

The ISO expects that additional detail can be developed for this aspect of the proposal through the stakeholder process and requests that interested stakeholders contribute their suggestions and comments.

5.2. Work Group 2 - LGIP Queue and Study Process

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

Some stakeholders have expressed the opinion 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 being developed by the ISO during 2011. 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 for applying factors in a consistent manner, 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 project should 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.

5.2.2. 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 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 that is comparable to the GIP 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 WDAT interconnection customers who seek deliverability to the aggregate of load on the ISO Controlled Grid.²¹ 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. The criteria would include:

- 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

²¹ 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."

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 for interconnection under this proposal for full deliverability on the ISO system.

- 2) The project 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.

5.2.3. 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 regarding what constitutes a "final" study report, the ISO intends to explore with stakeholders whether refinements should be made to the GIP in order 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 substantial changes would do so. The 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. Consequently, the ISO is proposing 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:

- The ISO issues a *draft* Phase I study report to the ICs, and IC has 14 calendar days to provide comments to ISO.
- The ISO will hold a results meeting following the issuance of the Phase I draft reports and will exercise best efforts to complete all results meeting within 35 calendar day of issuing the draft report.
- Following a results meeting, an IC has 7 calendar days after the date of the results meeting to provide additional comments on the draft Phase I report to the ISO.
- Following the results meeting the ISO & PTOs have 21 calendar days to revise the report and publish the *final* Phase I study report (14 calendar days after the date the IC is required to provide comments following the results meeting).
- The IC's posting timeline for the first financial security is the later of
 - 90 calendar days after publication of the *draft* Phase I study report, or
 - 30 calendar days after the publication of the final report (unless the IC has caused delays by not providing comments as specified above).

Phase II Posting

Current Process:

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

Proposed Process

- ISO issues a *draft* Phase II study report and IC has 14 calendar days to provide comments to ISO.
- The ISO will begin holding results meetings following the issuance of the Phase II draft reports and will exercise best efforts to complete all results meeting within 35 calendar day of issuing the draft report.
- Following a results meeting, an IC has 7 calendar days after the date of the results meeting to provide additional comments on the draft Phase I report to the ISO.
- Following the results meeting the ISO & PTOs have 28 calendar days to revise the report and publish the final Phase II study report (21 calendar days after the date the IC is required to provide comments following the results meeting).
- The ISO will issue a draft Generator Interconnection Agreement (GIA) to the IC 60 calendar days after the ISO issues the draft Phase II report to the IC.
- The ISO, PTO and IC will issue a final draft GIA to the IC 120 calendar days after the ISO issues the draft Phase II report to the IC.
- The IC is required to post the second financial security by the later of
 - 180 calendar days after the publication of the *draft* Phase II study report, or
 - 60 calendar days after the publication of the *final* report (unless the IC has caused delays by not providing comments as specified above).
- No interconnection customer initiated change (other than requesting correction of an error or omission that the ISO has determined is an error or omission that requires a report revision) can delay the posting date for the financial security. Asserted errors or omissions concerning cannot serve as the basis for a delay in the financial security posting date. However, the PTO and the ISO will use reasonable efforts to resolve any continuing disputes if the IC makes its second financial security posting in a timely manner.

If, following the publication of a final Phase II study report, it is discovered that the ISO or PTO Phase II study contains a substantial error or omission, necessitating a report revision then the final report date will be revised to the publication date of the revised report. For the purposes of this section the ISO proposed that, a “substantial” error or omission shall mean any of the following:

1. A substantial error or omission that increases an interconnection customer’s estimated interconnection costs (either network upgrades or Participating TO interconnection facilities) by at least 5 percent.
2. A substantial error or omission that reduces an interconnection customer’s estimated interconnection costs (either network upgrades or Participating TO interconnection facilities) by at least 20 percent.
3. A substantial error or omission that delays 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 by at least one year.

Any other errors discovered in the final Phase II study report shall be considered to be non-material and will not result in a change in the date of the report or a change in the financial security posting date.

In conjunction with this proposal, the ISO proposes that the current tariff that states 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), be revised to, "The ISO, PTO and the IC have *120 calendar days* after the draft Phase II report is released to the IC to negotiate a GIA."²²

5.2.4. 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.*²³

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 following is what the ISO proposes to provide more flexibility for the IC under such circumstances.

If the Network upgrades on behalf of an Interconnection Customer consist of multiple components and or multiple phases of a single large transmission project which will be constructed as multiple construction phases, then the Interconnection Customer's requirement to under CAISO GIP Section 9.3.2 to increase the amount of the Financial Security Instrument to equal one hundred percent (100%) of the cost of Network Upgrades shall be divided into separate components corresponding to the multiple components or multiple phases of scheduled construction. The PTO shall present a schedule outlining the cost and construction timing of the various components/phases of the IC's required network

²² <http://www.caiso.com/2b53/2b53950f1cf40.pdf> Section 11.2 Negotiation

²³ California Independent System Operator Corporation, Fifth Replacement FERC Electric Tariff, Appendix A, Master Definition Supplement

upgrades. This schedule will be the basis for determining what network upgrades are separate and discrete transmission project phases. An IC's network upgrades must be designed as separate and discrete project phases to qualify for separating the 100% posting requirement into multiple posting amounts and dates. To qualify as separate and discrete project phases the various phases of the required network upgrades shall meet the threshold criteria below.

1. The Interconnection Customer's network upgrades are to be built in two or more separate and discrete transmission project phases, and the IC's cost responsibility is \$5,000,000 or more for at least 2 of the phases; and
2. The actual or anticipated start of construction²⁴ date for each transmission project phase after the first phase that meets the cost threshold of criterion one is at least 12 months after the start of construction for the prior phase. Each such project phase that meets these criteria is a Qualified Phase.
3. If an IC has Qualified Phases and there are one or more additional project phases that are not Qualified Phases, the Financial Security Instrument for each of these non-qualified phases will be included with the financial security posting for the latest prior Qualified Phase. If no Qualified Phase proceeds a non-qualified phase, then the posting date for the first Qualified Phase shall be advanced to coincide with the earliest non-qualified phase.

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 need to perform a number of case studies to develop an appropriate model for accomplishing this. The ISO proposes to do this during the GIP-2 process and include the appropriate solution as part of this item's draft final proposal.

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

Some stakeholders have indicated that they have received notification of their required amounts for Interconnection Financial Security posting late, leaving them with a limited amount of time to make their postings. The notification process for the Transition Clusters second posting revealed issues that need to be addressed so that interconnection customers receive notification of their required posting amounts on a timely basis.

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 currently under development 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.

²⁴ The date that the project meets the definition for Construction Activities

5.2.6. Information provided by the ISO (Internet Postings)

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.

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

5.3.1. Provisions for partial termination of an LGIA

Currently, the pro forma LGIA requires the IC to put into commercial operation the full MW capacity of its generating facility as specified at the time it entered the Phase 2 study process.²⁵ In the case of a generating facility being constructed in phases, such that each phase may achieve commercial operation at a different time, this LGIA provision means that failure of the IC to construct one or more later phases of the project can be considered to be a 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. In some specific LGIA negotiations during 2010, where the circumstances were such that the network upgrades would take a particularly long time to complete (some 84 months), some customers expressed that there was business uncertainty as of LGIA execution as to whether the IC could build the later phases of the generating facility, and so 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

²⁵ <http://www.caiso.com/2b18/2b1876f23dfe0.pdf> section 2.4.3

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.

In addressing these questions, the ISO worked with specific ICs and PTOs to develop non-conforming “partial termination” provisions to enable the IC to purchase an option to terminate later phases by paying a pre-specified “partial termination charge” (“PTC”) that would be secured at LGIA execution or a date certain specified in the LGIA. In this way, the IC could achieve partial termination of the LGIA as to later phases without terminating the entire LGIA and without adverse impacts on the earlier phases of the project. The partial termination 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.

The scope of interconnection requests for which the partial termination was utilized has been limited to the transition cluster projects where the transmission upgrades were to be built over a period of approximately 84 months in multi-year phases (as stated above), *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 is considering whether the partial termination provisions should be incorporated into the tariff and the pro forma LGIA and whether to broaden the circumstances in which partial termination is made available to customers.

Eligibility for Partial Termination Provisions

As a starting point, the ISO will base partial termination provisions and eligibility requirements on the two LGIA’s which incorporated these provisions, both of which were conditionally approved by FERC²⁶. The ISO proposes the following to apply for projects seeking partial termination provisions. Of the five provisions listed, the first three would all need to apply plus either the fourth or fifth criterion:

- i. Type of generation project – The generation project is designed to be built in phases with discrete generation trains that can be operated independently.
- ii. Project size – The generation project must be no smaller than 200 MW
- iii. Partial Termination size – The project can use Partial Termination for up to 75% of the project size.
- iv. Timing differences – The transmission build out to achieve Full Capacity Deliverability Status cannot be timed to match the schedule of generation construction within 3 years of the COD of the project.

²⁶ Palo Verde II, LLC at 134 FERC ¶ 61,087 and Palen Solar, II at 134 FERC ¶ 61,108

- v. Construction schedule – Due to construction work force issues, components of the generation project cannot be built at the same time

Partial Termination charge provisions

In order to fairly value the risk to ratepayers regarding the potential for stranded costs, the ISO established a Partial Termination charge. As indicated above, 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 PTC was determined 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. This charge is based on the premise that partial termination could negatively impact rate payers 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 be invoked by the PTO and ISO if the project sponsor fails to meet milestones in the LGIA.

Calculation of the Partial Termination Charge multiplier

The Partial Termination Charge will be equal 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. In the LGIAs incorporating non-conforming Partial Termination provisions, a 10 percent multiplier in the place of X was arrived at through an evaluation of the risk of stranded transmission investment that could occur if a generating unit partially terminates. To determine this risk, two different evaluations were conducted; (1) the number of MW triggering the network upgrades and (2) the amount of generation in the queue which could utilize the transmission upgrades. In the Blythe LGIA²⁷ it was noted that if all the units exercised the Partial Termination provisions only an additional 50 MW seeking interconnection in the same area would trigger the full package of upgrades.

The other evaluation was reviewing the amount of generation in the queue which could benefit from these upgrades. It was determined there was 6,000 MW in the queue which could benefit from the transmission upgrades. In order to quantify these values in terms of selecting an appropriate multiplier percentage, the ISO proposes to continue this evaluation. Although additional qualitative measures could be used to determine the multiplier percentage the ISO understands that certainty and a 'brightline' threshold is important to stakeholders. The multiplier will have a floor of 10% and a ceiling of 50%. The ISO proposes to base the multiplier percentage on the ratio between the amounts of MW needed to trigger the network upgrades to the additional MW of generation in the queue that would utilize the same upgrades (excluding the MW the IC wants to cover by the PT provisions) under the following guidelines:

²⁷ <http://www.aiso.com/2866/2866c731616a0.pdf>

- $X = 0.1$ for $R \text{ (ratio)} \leq 0.1$
- $X = R$ for $0.1 < R \leq 0.5$
- $X = 0.5$ 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 | 50.0% |

Partial Termination Triggers

The ISO proposes to base conditions under which either the 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 security
- II. Partial termination may also be exercised mutually by the ISO or PTO if the transmission customer misses project milestones as set forth in the LGIA.

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

During work group discussions and in comments filed, stakeholders²⁸ explained the need for flexibility to downsize due to land, permitting and other issues. In these discussion and comments, the stakeholders generally emphasized issues beyond the control of the IC rather than business determinations that went to profit margins. 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 therefore proposes not to address this within the rubric of partial termination.

Nevertheless, the ISO understands that customers desire to build “contract certainty” around these considerations as well. Consideration of the issue requires weighing the 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. 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 the ISO has worked with projects sponsors on a case by case basis to evaluate the conditions and make recommendations to modify the project size.

The ISO proposes the following:

²⁸ First Solar, CalWEA, LSA & Recurrent Energy

The ISO and PTO would permit project modifications reducing the MW size of the generating facility for any reason that may occur between the effective 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 under the following conditions:

Other conditions:

- The network upgrade funding obligation will not be reduced, but will remain the same and the repayments will start according to the schedule consistent with the tariff
- If the project size reduction is greater than 5% then the ISO will conduct a more comprehensive review of the circumstances to assess whether to grant the size reduction.
- All other requirements imbedded in the LGIA with respect to posting amounts, timing of posting security, cost structure, etc. would not change in the LGIA as a result of the size reduction.

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

Under GIP Section 12.3.2, Participating TO repayment of the IC's funding of network upgrades does not commence until the entire large generating facility is completed and begins commercial operation. The section specifically states that in the case of phased generating facility, the IC is not entitled to repayment until COD of the entire generating facility (i.e. all phases). This straw proposal proposes a departure from this rule as follows:

1. In order to be eligible repayment upon COD for a phase of the generating facility,
 - a) The generating project itself must be capable of construction in phases (units or modules) and
 - b) The IC must have requested that the project be designated as a phased generating facility in the LGIA; and
 - c) The completed phase must correspond to these phases (electric generating units) described in the LGIA (i.e. if a 1000 MW generating facility was divided into 4 250 MW phases, the IC must complete and achieve COD of all of the 250 MW of electric generating unit 1 before it will qualify for repayment for that phase, all of the MW of electric generating unit 2 before the IC qualifies for repayment for electric generating unit 2 and so on.
2. The IC must have posted the 100% financial security covering all of the network upgrades and 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, and later breaches the LGIA, the PTO and ISO shall be entitled to offset against repayments for network upgrades related to phase one losses or damages resulting from the LGIA breach.

3. 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.
4. In a case where the ISO has permitted the IC to “substantially perform” its LGIA commitment to build the entire MW capacity of the generating facility (see straw proposal Section ____, addressing situations such as licensing/permitting restrictions that do not allow the customer to construct the entire generating facility), the IC right to repayment shall not be diminished because the substantial performance which the ISO accepted resulted in COD for less than all the MW.
5. The when repayments begin for any generating unit phase, the Participating TO shall hold back from repayments an amount corresponding to 10% (ten percent) of the repayment amount for that phase, until all of the generating facility phases receive COD. If all of the phases are completed, the holdback amount shall be tendered to the customer. If all of the phases are not completed, then the holdback shall become due to the ISO will be applied for the benefit of ratepayers as an offset against the transmission revenue requirement of the Participating TO.

There is a subsidiary question that arises when transmission upgrades will take multiple years to construct, and will be constructed in multiple construction components over several years, and the generating facility will not be able to deliver the full facility full output until all the network upgrades are completed. In such instances, should the IC repayment for any portion of the network upgrades commence before the entire network upgrades are “used and useful” and put into service? The ISO has taken the position that the IC is not entitled to repayment until all the network upgrades are placed in service.

5.3.4. Clarify site exclusivity requirements for projects on federal land

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 definitions for establishing site exclusivity on private land and public land. The definition for public land includes two components: (i) a final non-appealable permit, license (ii) or other right; to use the property for purpose of generating electric power.²⁹ In early 2009, the ISO issued a tariff bulletin describing the business practice

²⁹ 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 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.³⁰

The ISO proposes whether to update ISO criteria stated in the Technical Bulletin: During 2010, the BLM issued several updated “Instruction Memoranda” which have modified the rules under which solar energy project rights of way are processed. In light of this, the ISO desires to revisit the BLM process and evaluate whether it is necessary to modify the criteria under which the ISO determines whether an interconnection customer establishes site exclusivity when the project is located on public land administered by the BLM. The ISO has determined that, while some review and update of the criteria may be necessary, this effort will not result in a change of the definition of site exclusivity as stated in the ISO tariff. Rather, the ISO can evaluate the matter through the BPM process, and include the updated material in either the upcoming BPM for Generation Interconnection or in an interim updated technical bulletin.

5.3.5. Interconnection Refinements to Accommodate QF conversions, Repowering, Behind the Meter Expansion, Deliverability at the Distribution Level and other Special Circumstances Associated with Smaller Projects, Including Potential Modifications to the ISP and Fast Track

Interconnection processes and procedures must be periodically reviewed to ensure continued conformity with market trends. 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 by 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. The interrelated areas addressed in response to stakeholder input include:

- Reviewing the Independent Study Process (ISP) and Fast-Track procedures;
- Clarifying interconnection procedures applicable to qualifying facility (QF) conversions, facility repowerings, and other minor facility modifications;
- Assessing the feasibility of allowing increased behind-the-meter flexibility; and

under the management of the federal Bureau of Land Management shall be in a form specified by the Bureau of Land Management

³⁰ The technical bulletin, issued February 9, 2009 can be accessed at <http://www.caiso.com/1f42/1f42c00d28c30.html>.

- 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.

The ISP is designed for projects of any size that are electrically independent of cluster study projects. These projects can come into the queue at any time and once the study process starts it is anticipated the process will last from 210 to 240 days. Projects will be studied for energy only service, but can request to be studied for full capacity deliverability service in the next queue cluster window where it will be included in the cluster study process for upgrades needed to receive full capacity deliverability service. The interconnection customer must 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.

The Fast Track process is designed for resources 5 MW and below requesting energy-only deliverability status. Although stakeholders asked to have the 5 MW limit increased, the ISO maintains that this limit was extensively discussed in earlier proceedings and experience with the current limit is needed before the limit can be considered to be increased. These projects can also come into the queue at any time and once the study process starts it is anticipated the process will last approximately 120 days. The ISO currently has five projects each in the queue for both the ISP and Fast Track process.

Fast Track application to facility repowerings

In response to stakeholder³¹ suggestions, the ISO proposes to allow the Fast Track process to apply to repowerings of existing generation facilities. The identical screens, criteria and application procedures currently governing only *new* generation facilities would apply to this new category under the Fast Track additional MWs. However, it should be noted that the Fast Track provisions require the Generating Facility be no larger than 5 MW. Thus, the proposal would not allow larger facilities to incrementally expand using Fast Track. A proposal for incremental expansion of behind the meter capacity is set forth below, while the ISP is contemplated as the vehicle to potentially expedite general incremental expansion.

QF Conversion

The ISO tariff and BPMs provide limited guidance on the conversion of existing QF resources to “commercial status,” interconnection requirements for re-powered generation facilities (whether former QFs or not), and the appropriate process for determining whether modifications have changed “the electrical characteristics of the power plant” sufficiently to warrant review. Tariff Section 25.1.2 provides a process for a converting QF to submit an affidavit representing that “the total capability and electrical characteristics of the Qualifying Facility will be substantially unchanged.” The applicant is also required to describe any changes so that the ISO and PTO

³¹ NextERA

can verify whether it qualifies as not changing. If the applicant cannot meet the demonstration criteria, the interconnection process will apply.

Stakeholders have requested the resolution of two basic issues to resolve – maintaining deliverability and the need to evaluate electrical characteristics. With respect to deliverability, 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 such that their Net Qualifying Capacity is equivalent to their Qualifying Capacity under CPUC resource adequacy counting rules. The question then becomes whether a QF's deliverability should be adjusted upon conversion to PGA and, if so, how?

Three potential options have been identified by the stakeholder working group: equipment nameplate ratings, former QF contract capacity, and actual delivered capacity. Because of the potential variability, the recommended approach is to first look at actual delivered capacity and set the resource adequacy capacity using a methodology comparable to the mechanism used to establish RA capacity availability at branch groups. However, wind re-powering may require a different methodology given the likely increase production capability on peak. Nameplate values might be appropriate for base load dispatchable resources like biomass or geothermal if actual deliveries were constrained for some reason or another (other than transmission congestion or seasonal operational limitations). Contract capacity does not, however, appear to be an appropriate metric because it is based on different criteria than physical deliverability.

By assuming that deliverability is maintained, but not increased, the need for performing a network deliverability assessment is eliminated. As a result, stakeholders suggest that the assessment of the impact of changing electrical characteristics could be handled within the existing ISP. Generators that simply want to change their designation from QF to PGA resource without making physical changes to their facility would not be subject to any study, though they might have new metering requirements. As under current ISO Tariff provisions, such facilities would simply submit an affidavit and document their delivered peak period capacity. Facilities that are re-powering or otherwise reconfiguring their interconnection would submit an ISP application and be responsible for any reliability upgrades or interconnection facilities needed as a result of their reconfiguration. The ISP would also be available for repowerings or re-configurations that increase capacity to the extent they are seeking deliverability and can otherwise meet the ISP test. Otherwise, any increase in capacity requested for a re-powered or reconfigured facility would be subject to the cluster study process as if it were a new interconnection.

In summary, there would be four different paths that could be taken by any converting (or re-powering) generating resource:

- Path 1: for existing generators that are converting from QF to PGA without re-powering or reconfiguring their facility. They would use the affidavit approach using defined capacity calculation mechanism based on historic deliveries. Upgrades would be limited to PGA requirements for metering and instrumentation.
- Path 2: existing generators that are converting from QF to PGA and are making some minor changes to their facility. They would also use the affidavit approach to certify that

their changes are insignificant. Some kind of supplemental review process would probably be needed to verify that proposed changes are insignificant.

- Path 3: generators that are re-powering or reconfiguring their facilities without increasing deliverability. They would use the ISP mechanism to evaluate their interconnection facilities.
- Path 4: generators that are re-powering and want to increase their deliverable capacity. They would be required to enter into the cluster study process for their incremental capacity as well as reliability assessment for the entire new configuration.

Special Cases

Behind the meter expansion

Stakeholders have requested the ISO discuss options for allowing generating units to expand capacity behind the ISO revenue meter so long as their output would not exceed the capacity level that was formally studied and agreed to in the Generation Interconnection Agreement (“GIA Capacity” or “GIAC”), without going through the standard generation interconnection study process. The stated stakeholder goal is to obviate the need to go through an interconnection process for the capacity expansion, provided that the interconnection customer agrees that the additional capacity, once in-service, will be subject to appropriate operational restrictions. In other words, according to the stakeholder proposal these operational restrictions would effectively ensure that the change would not be a “Material Modification” under the GIP and, thus, would not require a new interconnection request or new studies. The underlying rationale is that such expansion of the maximum capacity of the plant may facilitate its operation at higher capacity factors and improve and optimize the utilization of its interconnection facilities and the overall transmission grid.

The technical/operational criteria and restrictions proposed below reflect the stakeholder proposal for the operation of the behind-the-meter expanded capacity are intended to make it possible to allow the addition of the expanded capacity without a formal interconnection study.

Business Criteria:

- The interconnection customer shall have one opportunity to request a capacity expansion for a project before its COD. After the COD of a project, the IC may apply once every two calendar years for a capacity expansion.
- The cost of reviewing such request and for adherence with technical requirements shall be borne by the IC.
- 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.

Technical Criteria:

- The total nameplate capacity of the expanded generation plant shall not exceed in the aggregate 25% of its GIAC. Accordingly, regardless of the right to seek an increase every two years that right will terminate once the cap is achieved changes.
- 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 reactive and short circuit electrical characteristics of the expanded capacity generation (LVRT, VAR control, and maximum fault current contribution) must be equal or superior to the formally studied generators.
- 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 greater 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 GIAC at any time. The ISO shall have the authority to trip the expansion breaker if the plant output exceeds its GIAC. The ISO may request that the generator provide more output than its GIAC.
- For Full Capacity (FC) interconnection, the Net Qualifying Capacity for the modified facility cannot exceed the on-peak capacity level assumed in the prior Deliverability Assessment. As noted in the business protocols, the interconnection customer can submit an interconnection request for a Deliverability Assessment in a future GIP application window to increase the NQC beyond that level.

The implications to competition, reliability and even Deliverability of this stakeholder proposal must be thoroughly assessed and vetted by the ISO and the larger stakeholder community. For instance, the proposal notes that total output shall not exceed the GIAC at any time. Will violation of that technical requirement constitute a default under the LGIA or simply an economic consequence whereby the resource cannot be paid for metered output greater than the GIAC or Pmax? Is that limitation ultimately politically sustainable, such that the practical outcome of the proposal is to restrict instances of curtailment by tripping the expansion breaker only for reliability purposes, i.e., during system emergencies? Similarly, are there unintended consequences of permitting a capacity expansion without a formal study process based on a representation that the short circuit and other electrical characteristics are equal or superior to the original capacity? Adoption of such a position would seem to also have implications for repowering projects that propose switching technologies.

Given these questions and concerns, the ISO requests comments not only on the proposal’s specific elements, but also whether the ISP provides sufficient, if not in some cases greater, flexibility to accommodate the objectives of the behind the meter proposal without potentially compromising reliability.

Discussion Issues

Distribution Level Deliverability

Deliverability consists of two distinct concepts – (1) Deliverability for resource adequacy purposes, which reflects the ability of the capacity to reach the aggregate of load during periods of peak demand and (2) deliverability, which reflects the ability of the capacity to generate energy in the absence of transmission constraints. This discussion focuses on the first type of Deliverability.

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. To the extent distribution level facilities are treated as reductions to demand, the issue of Deliverability will not be implicated. Assuming such resources do count as 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. Questions that need to be addressed is whether a "safe harbor" should be adopted whereby a project equal to or less than a certain size will be presumed Deliverable and issues related to the effect of multiple projects in a local area would be addressed through the transmission planning process.

5.4. Work Group 4 - LGIP/LGIA Interconnection Cost and Security Requirements

5.4.1. Financial security requirements for PTO funded network upgrades

Many stakeholders have indicated that there should be a further process regarding the interplay of PTO funding of network upgrades and IC cost responsibility for financial security postings. Current GIP provisions do not alter an IC's posting requirements when a PTO agrees to fund the network upgrades. Moreover, a PTO commitment to fund upgrades has typically been dependant on FERC approval for abandoned plant cost recovery, which FERC decides on a case-by-case basis and may not yet have decided at the time the LGIA is executed.³² Currently the LGIA does not make any distinction in terms of financial security requirements between situations in which the PTO has committed to fund network upgrades and those in which it has not.

The ISO proposes to incorporate the terms of its June 30, 2010 waiver request to FERC into the tariff. Following that model, the ISO proposes that an IC 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. A certain number of principles pertain to this situation:

1. The ISO does not propose to enter into the decision by the Participating TO whether to up-front fund network upgrades.

³² Order No. 679, FERC Stats. & Regs. ¶ 31,222 at P 163

2. The waiver does not relieve the customer of the 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 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 Participating TO 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,
 - a) In situations pertaining to the LGIP transition cluster where the second posting requirement arises before the interconnection agreement is finalized, the ISO and PTO have agreed that the requirement to post would be waived as long as the IC continued to engage in good faith efforts to complete the LGIA negotiation. The ISO proposes to incorporate this rule into the provisions for waiver of IFS when the Participating TO up-front funds.
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. In the ISO's experience to date with the LGIP transition cluster, the Participating TO has conditioned its up-front funding commitment upon the FERC grant of abandoned plant approval. (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) In the ISO waiver request, the ISO requested that the posting requirement be waived during the interim period between the Participating TO filing of a request for abandoned plant approval and a determination by FERC. The ISO proposes to include this feature in the proposal. In other words, the ISO proposes to view a PTO's conditional commitment to up-front fund network upgrades, contingent on FERC's approval of abandoned plant cost recovery, as sufficient to unconditional commitment by the PTO for purposes of determining the IC's posting requirements, unless and until FERC rejects the PTO's request.
 - b) Should the FERC deny a grant of abandon plant approval when the Participating TO's commitment was conditional upon that grant, then, the ISO proposes that IC 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. The ISO would propose that the tariff provisions provide that a negotiated interconnection agreement shall be deemed to be conforming if it: (i) extends the time period to post to a date no later than 75 days from FERC's initial order denying abandoned plant approval; or (ii) provides for continued Participating TO up-front funding of the network upgrades.

- c) The ISO does not take a position on the appropriateness of a Participating TO request for abandoned plant approval or other incentive rate or term in connection with its commitment to up-front fund the network upgrades.
5. The IC relief from the requirement to post for up-front funded network upgrades will be tied to a standardized set of milestones for IC development and construction of the generating facility.
6. The IC will have relief from the posting requirement for only as long as the Participating TO's up-front funding commitment is effective. Should the IC commit a breach resulting in default of the interconnection agreement, miss a milestone, or should some other condition arise which defeats the up-front funding commitment, then the IC will be required to post IFS within 30 days of notice by the ISO or PTO.

5.4.2. Revise ISO 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. ISO staff has recommended changing the LGIA so that the ISO does not have to provide the same evidence of insurance coverage as the other parties who are undertaking construction obligations, to allow the ISO to make its insurance information available via web posting rather than by tendering declarations of coverage to each individual IC as each LGIA is completed, and to delete the pro forma requirement that ISO include ICs as "additional insured" on its policies.³³ The following are issues related to revisiting the insurance requirements:

- Are all types of insurance appropriate for all parties to provide?
- Should the timing for IC to provide evidence of certain kinds of insurance requirements be adjusted?
- Is it appropriate for parties to add the other parties as "additional insureds" on the policies of insurance?
- Commercial availability of various insurance coverages.

³³ These provisions are listed in section 18.3.5 Appendix V which lists the ISO as an insurance provider and section 18.3 of Appendix CC where the obligation exists for the ISO to provide insurance.

The ISO offers the following proposal for adjustment of the insurance provisions in the LGIA and SGIA:

- **18.3 Insurance.** As indicated below the designated Party shall, at its own expense, maintain in force throughout the periods noted in this LGIA, and until released by the other Parties, the following minimum insurance coverages, with insurers rated no less than A- (with a minimum size rating of VII) by Bests' Insurance Guide and Key Ratings and authorized to do business in the state where the Point of Interconnection is located, except in the case of any insurance required to be carried by the CAISO, the State of California:
- **18.3.1 Employer's Liability and Workers' Compensation Insurance** The Participating TO and the Interconnection Customer shall maintain such coverage from the commencement of any commencement of Construction Activities providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located. The Participating TO shall provide the Interconnection Customer with evidence of such insurance within thirty (30) days of any request by the Interconnection Customer. The Interconnection Customer shall provide evidence of such insurance (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 subsection 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.
- **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

The proposed modifications to the insurance provisions remove the ISO from the obligation to show insurance, and also remove the obligation of the other parties to name the ISO as an additional insured. The ISO believes that this action is appropriate, as (i) the ISO does not perform any of the obligations of the LGIA off-site, nor, in particular, on the site of either Participating TO or IC property, and (ii) the ISO does not engage in any construction work under the LGIA. The provisions also adjust the timing of some of the insurance requirements, so that evidence of insurance connected with potential construction activity is not required until prior to entry onto construction sites.

5.4.3. Standardize use of adjusted vs. non-adjusted dollars in 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 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.

The ISO has undertaken 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 recommends that all cost estimates contained in the Phase I interconnection study reports, Phase II interconnection study reports and interconnection agreement appendices include a separately identified discussion regarding adjusted dollars. In this regard, the discussion should describe the adjustment in terms of base dollars and annual or other periodic adjustments, including what items are accounted for in the adjustment (such as inflation) and identifying any index used, and the reason the adjustment is appropriate. Even if the adjustment method and approach are contained in the Participating TO's per-unit cost estimation documentation, the explanation should be repeated in the study report and agreement appendix. Moreover, all Participating TOs should use the same criteria for specifying the base year and the same inflation adjustment. If other items are embedded within "constant dollar" formulas, the ISO will rely upon the Participating TOs to identify the formula elements and to justify their inclusion. Absent the Participating TO's presenting such information for discussion in the GIP-2 stakeholder process, the ISO's proposal will include only inflation as an element of dollar adjustment to maintain "constant dollars."

5.4.4. 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. It is the ISO's position that the maximum cost responsibility is the lower of Phase 1 or Phase 2 estimates, and that the 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). To the extent that existing tariff language may be subject to ambiguity, the ISO proposes to provide clarifying language in the GIP, most likely to 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 1 or Phase 2 study estimates.

5.4.5. Consider adding a “posting cap” to 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. Some stakeholders have suggested that a similar “not to exceed” cap be included within for the PTO’s Interconnection Facilities. The ISO does not have a proposal for this topic.

5.5. Work Group 5 - LGIP Technical Assessments

5.5.1. 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.

To provide more flexibility and help the interconnection customers manage the cost responsibility associated with the delivery network upgrades, it is proposed to add a third deliverability status Partial Deliverability (PD) as an option. 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
- reduction of PD level to a new specified PD level in MW.

Pursuant to 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. This 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.

5.5.2. Conform technical requirements under the LGIA

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, Item 11 of Attachment A to GIP Appendix 1 Interconnection Request will be modified and organized 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.

5.5.3. Revisit tariff requirements for off-peak deliverability assessment

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 will continue to perform off-peak deliverability assessments 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.

5.5.4. Annual updating of ISO's advisory course on partial deliverability assessment

Parties have asked the ISO to consider allowing temporary use of deliverability capability for a later queue position project that achieves commercial operation before an earlier queue position project. The ISO proposes to provide information on the potential for temporary use of deliverability capability by performing annual updates, upon request, to the advisory course of construction partial deliverability assessment that was described in a technical bulletin and first performed in fall 2010.³⁴

The ISO will perform these updates after the completion of the Phase II interconnection study for the cycle. The interconnection customers who desire to receive the advisory assessment report for their interconnection request need to make the request to the ISO. The ISO will then perform the advisory assessment for each study year from the earliest Commercial Operation Date among all interconnection projects requesting the assessment to the latest estimated operation date among all the delivery network upgrades required for the project or the study group.

The methodology for the advisory partial deliverability assessment will take into account the most current publicly available information on commercial operation dates for all the new generation, including those projects in the serial group. Each study year will model the generating facilities and transmission upgrades as projected by their commercial operation dates. As a result, the partial deliverability for a particular project before all required delivery network upgrades are in-service could change over different study years; in particular, a project's temporary partial deliverability amount could decline from one year to the next when an earlier queue position project with prior right to the network deliverability capability achieves commercial operation.

The proposed annual assessment will be advisory and informational only. Any commitment regarding a project's deliverability (i.e., its NQC) will be determined as it is today in the annual NQC assessment the ISO performs in advance of each RA compliance year.

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

Some stakeholders have conveyed in the meetings to date 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 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). Comments were expressed regarding using the Independent Study Process, which allows for the submittal of an interconnection request at any time during the year, to meet a proposed RAM requirement that projects must be active in an interconnection queue to qualify for participating in the RAM program. The ISO will work with the CPUC and potentially other stakeholders to determine the most appropriate method for accomplishing the result that this particular RAM criterion is attempting to achieve. While the ISO does not agree that the Independent Study Process is the appropriate mechanism to meet the proposed RAM criteria, it may be appropriate to develop a separate mechanism that allows projects to enter the queue outside of the two current open queue windows each year.

³⁴ The technical bulletin is available here: <http://www.caiso.com/2802/2802860e49b50.pdf>

However, the ISO believes it is preferable for the CPUC and the ISO to work together with interested stakeholders to develop a criterion for the RAM program that meets the needs of the RAM without requiring a unique solution in the ISO GIP, if possible.

6. Next Steps

The ISO will host a meeting on April 28th from 9:00 a.m. to 4:00 p.m. to discuss the straw proposal and answer questions. Following the April 28th 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 May 6. However, if stakeholders want to offer comments in advance of the April 28th meeting for discussion at the meeting, they are encouraged to submit those comments by close of business on April 21st. 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>. The next round of work group meetings will take place the week of May 9th; exact dates and times will be sent to stakeholders the week prior.

In the next round of work group meetings, participants will analyze and discuss the merits of the straw proposals for each group's topics, with the goal of developing additional details, identifying ways to improve the proposals, and considering potential viable alternatives that may be offered. After the ISO receives the written comments on May 6, work group leads may be contacting commenters on their topics to request additional information or clarification of their comments to be provided prior to or at the work group meeting. The ISO will allow time on the April 28 meeting agenda for further discussion of how best to utilize the work group process.

7. Addendum

Stakeholder Proposals and Comments **Following Work Group Meetings**

Project Size Adjustments in GIP and GIA Resulting from Permitting Restrictions

Straw Proposal

April 7, 2011

Submitted by Kristin Burford for Large-scale Solar Association

Existing Policy

- The GIP already provides flexibility to reduce the size of an interconnection request between Phase I and II.
- After Phase II, an interconnection customer (IC) may request a modification under the GIP and GIA. A Material Modification is defined in the CASIO tariff as a “modification that has a material impact on the cost or timing of any Interconnection Request or any other valid interconnection request with a later queue priority date.”
- Furthermore, the GIP and GIA recognize that certain events leading to withdrawal or failure to reach COD should provide for mitigated financial exposure to the IC:
 - Lack of PPA after good faith efforts to pursue and lack of necessary permit are grounds for partial refund of network upgrade IFS (GIP Section 9.4.1);
 - Should the IC fail to reach commercial operation after funding network upgrades, the IC is eligible for reimbursement by the PTO if another project is later constructed that makes use of the network upgrades (Article 11.4.1 of GIA).

Principals

- If an IC knows that it needs to downsize the project, it is better to have this incorporated into the broader plan sooner rather than later.
- Reductions in project size post execution of the GIA is a cost and planning issue not a default issue.
- Reasonable certainty to regarding cost exposure should be afforded to projects that are required to adjust size due to unforeseen permitting constraints that limit project size

Proposal

Ability to reduce size between Phase I and II remains unchanged. Furthermore, the IC’s ability to request a modification under current GIP/GIA is preserved.

At any time, before or after signing GIA, if an IC receives a permit for a reduced project size, the IC may modify the project size if the projects permit either:

- Is granted but only for a reduced project size;

- Contains material conditions that may be avoided if the project is reduced in size; or
- Due to change in law, regulations, or government policy, project owner is required to reduce project size in permit request.

For a demonstrated project size reduction of any amount, the IC should first be provided the option to modify the GIA to allow for a subsequent project phase that can come online within [3] years of original COD if it can reasonably demonstrate that it is pursuing additional proximal site control and permits to reach the original project size. The network upgrade funding obligation remains the same and the repayments will start at according to a schedule consistent with the tariff. [If the tariff is modified to allow repayment of certain network upgrades when they are completed, then those changes would apply here.]

If the requested size reduction is $\leq 20\%$ and ≤ 50 MW, the IC has the option to modify the GIA to reflect the new project size.

- The funding obligation remains the same and the repayments will start at project COD.

If the requested size reduction is either $>20\%$ or > 50 MW, then the IC has the option to modify the GIA to reflect the new project size. The responsibility for network upgrades is treated as follows:

- If the plan of service network upgrades (i.e., identified network upgrades to serve project or group*) would be unchanged by the project size reduction, the project funding obligation remains the same; repayments will start at the project COD
- If the plan of service is determined to change as a result of the reduced project size, then:
 - The PTO makes a good faith estimate of the cost of canceling the “excess” upgrades;
 - The IC funds the network non-excess upgrades required to serve the project and repayment will start at project COD; and
 - With respect to the “excess” upgrades, the IC may elect to either:
 - Pay a partial termination fee for release from obligation to pay for “excess” upgrades capped at the higher of (1) the estimated cancelation costs or (2) release of financial security at the rate afforded to projects unable to obtain a permit (i.e., consistent with GIP Section 9.4.1); or
 - Fund “excess” network upgrades which are in turn constructed and receive repayment from PTO when such upgrades are later determined to be used by a subsequent project or load.

*For administrative feasibility, the PTO may limit the assessment of alternate plan of service determination to once per year.

LSA Straw Proposal
Financial Security Postings – Timing and Amounts
April 5, 2011
Submitted by Ellen Berman for Large-scale Solar Association

General Principles:

- 1) Timing of Financial Security Postings: LSA believes that generators should have the ability to see a draft report of each of the studies (Phase I and Phase II) and have an opportunity to correct errors, omissions or other potential problems prior to making the financial security postings. At the same time, LSA understands, and supports, the CAISO's position that the process must continue to move forward in a timely fashion.
- 2) Amount of Financial Security Postings: The financial security postings were set at rather high levels so that interconnection customers would have to demonstrate viability, or "skin in the game." However, for larger projects, the posting amounts are so high, that they often cause otherwise viable projects that are timely progressing to drop out. Additionally, some projects are "double paying" to prove viability; that is, these projects have to put up substantial security under their power purchase agreements and then put up additional funds for the transmission postings. LSA proposes that Interconnection Customers be able to reduce their financial security postings if they are able to demonstrate certain – and limited – indicia of viability. There would be no change to the amounts for posting on the PTO Interconnection Facilities.
- 3) Financial Security Posting Where Utility has Agreed to Upfront Fund: As the CAISO acknowledged with its waiver request for the Transition Cluster, the financial security postings are not necessary where a utility has agreed to upfront fund a transmission project upon which the Interconnection Customer will rely. Any milestones demonstrating viability should be covered under the three-party LGIA. LSA would like to explore whether the CAISO would have any ability under the LGIA to enforce milestones.

Detailed Straw Proposal

- 1) Timing of Financial Security Postings
 - a. Phase I
 - i. Draft Phase I study report issued
 - ii. Results Meetings with all of the Interconnection Customers
 - iii. Interconnection Customer may bring up an error, omission or potential problem with the Phase I study report within 5 business days of the Results Meeting
 - iv. CAISO, PTO and IC will use best efforts to resolve any such error, omission or potential problem within 45 days after the draft Phase I report is issued.
 - v. The CAISO will issue a Phase I Final Report within 60 days of the issuance of the draft report, and the Final Report will identify any asserted errors or omissions that could not be resolved.
 - vi. If any asserted errors or omissions for the Network Upgrades identified cannot be resolved before issuance of the Final Report, the first security posting will still be due 30 days after issuance of the Phase I Final Report (i.e., 90 days after the issuance of the draft Phase I study report), except in the following instance:

If a group of Interconnection Customers, representing both a majority of projects and a majority of the megawatts in the relevant queue cluster and geographical region, agree that there is a material error, omission, or other problem affecting the scope and/or cost of the Network Upgrades

identified for such queue cluster and geographical region, then such Interconnection Customers may vote to delay the posting date for the first financial security posting on a day for day basis until there is a resolution of such alleged error or omission.

For purposes of this section, a “material” error, omission or other problem shall mean an error, omission or other problem that is reasonably likely to change the timing and/or cost of the interconnection request by more than 1 year and/or 25%, respectively.

- vii. No interconnection customer initiated change (other than requesting correction of an error or omission) can delay the posting date for the financial security. Asserted errors or omissions concerning PTO’s Interconnection Facilities cannot serve as the basis for a delay in the financial security posting date; however, the PTO and CAISO must continue to use commercially reasonable efforts to resolve continuing disputes if the Interconnection Customer timely makes the first financial security posting.

b. Phase II

- i. Draft Phase II study report issued
- ii. Results Meetings with all of the Interconnection Customers
- iii. Interconnection Customer may bring up an error, omission or potential problem with the Phase I study report within 10 business days of the Results Meeting or within 10 business days of receiving an addendum to Phase II study.
- iv. CAISO, PTO and IC will use best efforts to resolve any such error, omission or potential problem within 105 days after the draft Phase II report is issued.
- v. The CAISO will issue a Phase I Final Report within 150 days of the issuance of the draft report, and the Final Report will identify any asserted errors or omissions that could not be resolved.
- vi. If any asserted errors or omissions cannot be resolved before issuance of the Final Report, the second security posting will still be due in accordance with Section 1(b)(vii) below, except in the following instances:

If a group of Interconnection Customers, representing both a majority of projects and a majority of the megawatts in the relevant queue cluster and geographical region, agree that there is a material error, omission, or other problem affecting the scope and/or cost of the Network Upgrades identified for such queue cluster and geographical region, then such Interconnection Customers may vote to delay the posting date for the second financial security posting on a day for day basis until there is a resolution of such alleged error or omission; and/or

If the CAISO and/or the relevant PTO agree with Interconnection Customer(s) that there is a material omission, error or problem that has not been resolved, the posting date for the second financial security shall be delayed on a day for day basis until there is a resolution of such error, omission, or problem.

For purposes of this section, a “material” error, omission or other problem shall mean an error, omission or other problem that is

reasonably likely to change the timing and/or cost of the interconnection request by more than 1 year and/or 20%, respectively.

- vii. The second financial security posting shall be due the later of: (1) 180 days after the Phase II draft study is issued; (2) 150 days after receipt of a complete draft LGIA, with all appendices complete; and (3) 60 days from the date of an executed LGIA among CAISO, PTO and Interconnection Customer or an LGIA is submitted unexecuted to FERC.
- viii. No interconnection customer initiated change (other than requesting correction of an error or omission) can delay the posting date for the financial security. Asserted errors or omissions concerning PTO's Interconnection Facilities cannot serve as the basis for a delay in the financial security posting date; however, the PTO and CAISO must continue to use commercially reasonable efforts to resolve continuing disputes if the Interconnection Customer timely makes the second financial security posting

2) Amount of Financial Security Postings

a. Where Utility Has Not Conditionally Agreed to Upfront Fund

- i. Financial Security Posting #1 – Network Upgrades: Lesser of (1) 15% of total Network Upgrades costs assigned to generator; (2) \$20,000 per MW; and (3) \$7.5 million (but not less than \$500K).
- ii. Financial Security Posting #2 – Lesser of (i) \$15 million or (2) 30% of total cost responsibility of Network Upgrades cost assigned to generator (but not less than \$500K).
- iii. Additional Rules Applying to Both Financial Security Posting 1 and 2

Notwithstanding the foregoing, an Interconnection Customer's Financial Security posting shall be reduced as follows, either at the time the Interconnection Customer makes the relevant posting or within 15 days after the Interconnection Customer can demonstrate one or more of the following:

- 1) If Interconnection Customer has entered into an acceptable power purchase agreement (PPA) for Energy or capacity of the Generating Facility, the applicable financial security posting may be reduced dollar for dollar, up to 50% of the applicable financial security posting obligation, by the security amount it has posted with its buyer for the performance obligations under the PPA.
 - a. Interconnection Customer must demonstrate to the CAISO that it has posted such security for a PPA and that the site in the relevant interconnection request has been assigned to such PPA.
 - b. The CAISO agrees that it will be subject to any confidentiality requirements under the Interconnection Customer's PPA, and that it will enter into an NDA, if required.
- 2) If Interconnection Customer has applied to the primary issuing Governmental Authority of the permit necessary for the construction or operation of the Generating Facility for such permit (i.e., Permit to Construct or its equivalent) and has been deemed "data adequate" (or its

equivalent), Interconnection Customer's applicable financial security posting will be reduced by 25%.

- 3) If Interconnection Customer has received approval from the primary issuing Governmental Authority of the permit necessary for the construction or operation of the Generating Facility (i.e., Permit to Construct or its equivalent), Interconnection Customer's applicable financial security posting will be reduced by 60%.
- 4) In no event shall the Interconnection Customer's security deposit be reduced below \$500,000 or by more than 60% of the relevant financial security posting that otherwise would have been due.

b) Where Utility Has Conditionally Agreed to Upfront Fund

As the CAISO acknowledged with its waiver request to FERC for the Transition Cluster, the financial security postings are not necessary or appropriate where a utility has agreed to upfront fund a transmission project upon which the Interconnection Customer will rely. Any milestones demonstrating viability should be covered under the three-party LGIA, which has been the practice thus far. These milestones are sufficient to ensure that an Interconnection Customer is progressing its project appropriately. While LSA believes this is already the rule under the Tariff, it would be useful for the CAISO to clarify the Tariff so that there is no ambiguity. Additionally, since the LGIA is a three party agreement, LSA would like to explore whether the CAISO would have any ability under the LGIA to enforce milestones, if the PTO is not enforcing them.

Straw Proposal Clarification
April 5, 2011
Submitted by Susan Schneider for Large-scale Solar Association

I'm writing on behalf of the LSA to: (a) clarify the scope of effort for the five GIP-2 workgroups; and (b) provide some additional input on issues we have recommended for the GIP-2 scope that we are not sure are included so far. Attached is a summary of our understanding of the workgroup scopes, based on the information provided for the conference call last Friday.

Confirmation of topics we think are in scope: Please confirm that these LSA/CalWEA-recommended items, which were not explicitly included in the GIP-2 scope that you circulated for the call, are included in scope:

- **Work Group 2:** These items were recommended by LSA/CalWEA for Work Group 1; however, based on discussions in Work Group 2, we believe that they might be covered under the topic "Triggers for Financial Security Posting Deadlines:"
 - Draft Phase II Study (originally recommended for WG1)
 - Clarify IC option to build different facilities and/or perform related studies/functions (originally recommended for WG1)
- **Work Group 3:** The item we call "Modification of project size due to permit or other restrictions (non-phased projects)" was recommended by LSA/CalWEA for this workgroup and, based on discussions so far, we believe think that it is in scope. As discussed on the call, this is a high-priority item for us, as projects move ahead in the permitting process. We do not see why the presence or lack of project phasing is relevant to the partial LGIA termination issue, particularly when the project modifications are due to factors largely beyond a developer's control, like permits that restrict project size to a lower capacity than specified in the developer application. Reductions in project size, and the related partial termination provisions, should apply whether the downsizing involves cancellation of an entire phase or a size reduction for other reasons.
- **Work Group 5:** Based on discussions in this work group, we believe that these items might be covered under the topic "Annual updating of ISO's advisory course of partial deliverability assessment:"
 - Deliverability vs. CODs (temporary use by lower-queued projects of deliverability "allocated" to higher-queued projects not yet on-line)
 - Temporary partial deliverability (deliverability before all Delivery Network Upgrades are on-line)

Input on CalWEA/LSA-recommended issues that may not be included yet

- **Cost-allocation methodology (WG1):** As discussed on the call last Friday, there are several broad issues related to study methodology that the CAISO deferred earlier and that should be addressed here. These include: (1) methodology to determine needed upgrades; and (2) cost allocation to those "triggering" an upgrade vs. those (based on

flow studies) that will effectively use it. This latter issue could include issues related to cost responsibility for upgrades triggered by (and thus funded by) one cluster that benefit a later cluster in the same area.

- **Queue-clearing procedures (WG4):** There are nearly 9,000 MW of pre-Transition Cluster projects with executed LGIAs in the queue, and nearly 8,000 MW of such projects without executed LGIAs. Some of these projects have been in the queue for as long as 12 years, and we understand that many of those in the queue the longest have made little or no apparent development progress.

We understand that this issue is a touchy one, especially for projects that followed the rules applicable at the time of their Interconnection Requests. However, LSA is concerned that non-viable projects remaining in the queue are causing later-queued project to trigger expensive transmission upgrades that are not really needed and, thus, undermining California and CAISO policy goals for new generation.

As a good first step, the CAISO should use its existing tariff and contractual authority to do the following, for these projects: (1) review the progress of projects with executed LGIAs, and diligently enforce continued compliance with applicable rules; and (2) drive to resolution the remaining projects, including filing unexecuted LGIAs with FERC by the end of 2011 for projects with feasible plans of service where there are no remaining issues on the part of the CAISO or PTO.

- **IFS Release & Study Deposit Refunds for unilateral POI change (WG4):** The current rules provide for partial refunds and IFS release where there is a significant (cost impact exceeding 30% or \$300K) POI change between Phase I and Phase II, but they are silent about what happens if the change occurs in the Phase I Study and then carries over into Phase II, or if the change occurs after Phase II. We believe that, if there is a significant POI change not agreed to by the Interconnection Customer, the IC should receive a full IFS release and a refund of study funds not yet spent.
- **IFS Release for PTO failure to build Network Upgrades (WG4):** The CAISO assured us during the phone call last Friday that unneeded Network Upgrades would not be built and that security would be released for those upgrades. However, there is no provision in the GIP for: (1) a routine review of needed upgrades if a project drops out, for that cluster or later clusters; (2) mandatory adjustments to IFS amounts for upgrades not found to be needed, or otherwise not constructed for other reasons (e.g., failure of the PTO to secure permits or other regulatory approvals). These matters could be addressed under SCE's suggested topic addition to cover post-Phase II adjustments; we strongly support SCE's suggestion and ask that these topics be included there.

We appreciate the opportunity to offer these comments and hope that you will give them serious consideration in the upcoming CAISO Straw Proposal.

Straw Proposal for Fast Track and Independent Study Process improvements
March 28, 2011
Submitted by Tim Lindl for CAC/EPUC

The Cogeneration Association of California and the Energy Producers and Users Coalition (CAC/EPUC) appreciate the inclusion of Item 25 in the scope of consideration for workgroup 3. I mentioned on the initial group 3 call, and Friday's call, the consideration of an amendment to the eligibility criteria for Fast Track that would make the process available to existing projects based on *incremental changes* to nameplate capacity.

CAC/EPUC envisions Fast Track interconnections under a variety of scenarios where the current study deposits and financial security postings of the GIP are overly burdensome. For example, an existing CHP plant that historically exports 85 MW plans to repower or add generation with the resulting nameplate output of the facility increasing by 5-10 MW, and with the IC covering the cost of the few, if any, interconnection upgrades required for the project. The project fails the electrical independence tests for the ISP for reasons other than those related to the commercial operation date. CAC/EPUC submit that Fast Track should be available to accommodate these projects since incremental increases represent no greater risk to the grid than new, greenfield projects that are already eligible for Fast Track. In fact, the existing facility and contracts, and the brownfield nature of the projects, minimize the risk to CAISO and the IOU of the projects not going forward and are *less* risky than projects that currently qualify for Fast Track. CAC/EPUC also believes that the Fast Track ceiling could be raised as high as 20 MW without putting the grid at risk.

We hope that the CAISO will include the proposal to base Fast Track eligibility on incremental increases in nameplate in workgroup 3's agenda, or elsewhere in the GIP 2. Please contact me with any questions or concerns.

Straw Proposal for Behind-the-Meter Capacity Expansion
March 24, 2011
Submitted by Dariush Shirmohammadi for CalWEA

Objective:

Allow generating units to expand capacity behind the CAISO revenue meter as long as their output would not exceed the capacity level that was formally studied and agreed to in the Generation Interconnection Agreement (“GIA Capacity” or “GIAC”), without going through the standard generation interconnection study process.

Description of the Issue/Problem:

Some Interconnection Customers (ICs) wish to expand their installed generation capacity behind the CAISO revenue meter while maintaining the maximum capacity of their plant (as under GIP studies or agreed to in their GIA), in order to operate the plant at higher capacity factors and to improve and optimize the utilization of their Interconnection Facilities and the overall transmission grid. These ICs wish to expand the capacity of their plants without having to go through the formal interconnection study process. Recognizing the concerns about the potential reliability and deliverability impacts of such expansions, they are willing to work with the CAISO to establish the necessary business and technical criteria and restrictions to enable such generation expansion.³⁵

The request for behind-the-meter capacity expansion would be enabled at any one of several stages of the GIP process. Namely, the IC would be able to specify that it will be installing more generation capacity at the time that its generation interconnection request is submitted, or while interconnection studies are being performed. The IC would also be able to specify that it will be installing more generation capacity than was authorized in the GIA after the signing of the GIA but before final COD or after the COD.

The goal is to obviate the need to go through an interconnection process for the capacity expansion, provided that the IC agrees that the additional capacity, once in-service, will be subject to appropriate operational restrictions. In other words, these operational restrictions would effectively ensure that the change would not be a “Material Modification” under the GIP and, thus, would not require a new Interconnection Request or new studies. A summary verification study may, however, be performed.

Proposed Technical and Operational Criteria:

By establishing appropriate business and technical/operational criteria and restrictions for the expanded capacity, the CAISO can accommodate the need for expanded generation capacity without adverse reliability impacts beyond what was (or will be) formally studied and mitigated as part of GIP process and agreed to in the GIA, if applicable. The technical/operational criteria and restrictions proposed below for the operation of the behind-the-meter expanded capacity should make it possible to allow the addition of the expanded capacity without a formal interconnection study. It should be noted that the CAISO currently allows the capacity of a single facility to be larger than the value in the Interconnection Agreement (IA) provided that the generator output never exceeds the IA agreed value.

In the following, we propose the high level business and technical criteria that we believe makes it possible to implement this feature for consideration in the GIP Phase 2 reform process.

³⁵ This arrangement is expected to be mainly applicable to situations where generation capacity is provided through multiple generation modules such as in wind/solar farms or multi-turbine gas generation facilities (CCGT or CT) where the capacity addition would be provided via additional generating modules.

Business Criteria:

- The IC must inform the CAISO of its intention to install more capacity behind the meter without exceeding its GIAC as early as possible. IC must submit an official request for this purpose to CAISO. The cost of reviewing such request and for adherence with technical requirements shall be borne by the IC.
- The IC shall have one opportunity to request a capacity expansion for a project before its COD. After the COD of a project, the IC may apply once every two calendar years for a capacity expansion.
- 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 CAISO 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.

Technical Criteria:

- The total nameplate capacity of the expanded generation plant shall not exceed 25% of its GIAC. This maximum expansion limit shall be reviewed annually by the CAISO for potential changes.
- 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 reactive and short circuit electrical characteristics of the expanded capacity generation (LVRT, VAR control, and maximum fault current contribution) must be equal or superior to the formally studied generators.
- The plant shall have its expanded capacity under a separate breaker called the “expansion breaker” at all times. Alternatively and with CAISO/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 greater than the planned behind the meter capacity expansion figure).
- Unless specifically requested by the CAISO, the total output of the generator shall not exceed its GIAC at any time. The CAISO shall have the authority to trip the expansion breaker if the plant output exceeds its GIAC. The CAISO may request that the generator provide more output than its GIAC.
- For Full Capacity (FC) interconnection, the RA Net Qualifying Capacity for the modified facility cannot exceed the on-peak capacity level assumed in the prior Deliverability Assessment. As noted in the business protocols, the IC can submit an Interconnection Request for a Deliverability Assessment in a future GIP application window to increase the NQC beyond that level.

As noted above, all the major technical requirements consist of functions and capabilities that need to be in place when the capacity expansion is implemented. Hence, we do not see the need for any formal studies for implementing such behind the meter capacity expansion.

**Straw Proposal for Conversion from Qualifying Facility status to
Participating Generator Agreement
March 23, 2011**

Submitted by Phillip Muller on behalf of Ormat

The CAISO tariff and BPMs provide limited guidance on the conversion of existing QF resources to “commercial status,” interconnection requirements for re-powered generation facilities (whether former QFs or not), and the appropriate process for determining whether modifications have changed “the electrical characteristics of the power plant” sufficiently to warrant review. Tariff Section 25.1.2 provides a process for a converting Qualifying Facility to submit an affidavit representing that “the total capability and electrical characteristics of the Qualifying Facility will be substantially unchanged.” The applicant is also required to describe any changes so that the ISO and PTO can verify whether it qualifies as not changing. As the process currently stands, the applicant will be required to submit an Interconnection Request and comply with the Generation Interconnection Process. Prior to the implementation of the Generator Interconnection Process Reform and the establishment of annual queue clusters, this was not a particularly big deal. With the development of annual queue cluster windows and substantially larger deposit requirements, going into the Interconnection Process has become a major undertaking.

There are two basic issues to resolve – maintaining deliverability and the need to evaluate electrical characteristics. Each is discussed separately.

Maintaining Deliverability

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. While this is a fairly straightforward process for generators that currently have a PGA, its application to QFs under PURPA contracts is less clear. Standard Offer contracts executed with the QFs 20 or more years ago do not use the same criteria for establishing capacity that are used today. As a result, it is necessary to develop a mechanism for establishing deliverable capacity. There are (at least) three criteria that could be used for that purpose: equipment nameplate ratings, QF contract capacity, and actual delivered capacity. Because of the potential variability, the recommended approach is to first look at actual delivered capacity and set the RA capacity using a methodology comparable to the mechanism used to establish RA capacity availability at branch groups. Nameplate values might be appropriate for base load dispatchable resources like biomass or geothermal if actual deliveries were constrained for some reason or another (other than transmission congestion or seasonal operational limitations). Contract capacity does not appear to be an appropriate metric because it is based on different criteria than physical deliverability.

Electrical Characteristics

By assuming that deliverability is maintained, the need for performing a network deliverability assessment is eliminated. As a result, the assessment of the impact of changing electrical characteristics could be handled within the existing Independent Study Process (ISP). Generators that simply want to change their designation from QF to PGA resource without making physical changes to their facility would not be subject to any study, though they might

have new metering requirements. They would simply submit an affidavit and document their delivered peak period capacity. Facilities that are re-powering or otherwise reconfiguring their interconnection would submit an ISP application and be responsible for any reliability upgrades or interconnection facilities needed as a result of their reconfiguration. Any increase in capacity requested for a re-powered or reconfigured facility would be subject to the cluster study process as if it were a new interconnection. [what about increases that don't initially request deliverability?]

Study Process

There would be four different paths that could be taken by any converting (or re-powering) generating resource.

Path 1: for existing generators that are converting from QF to PGA without re-powering or reconfiguring their facility. They would use the affidavit approach using defined capacity calculation mechanism based on historic deliveries. Upgrades would be limited to PGA requirements for metering and instrumentation.

Path 2: existing generators that are converting from QF to PGA and are making some minor changes to their facility. They would also use the affidavit approach to certify that their changes are insignificant. Some kind of supplemental review process would probably be needed to verify that proposed changes are insignificant.

Path 3: generators that are re-powering or reconfiguring their facilities without increasing deliverability. They would use the ISP mechanism to evaluate their interconnection facilities.

Path 4: generators that are re-powering and want to increase their deliverable capacity. They would be required to enter into the cluster study process for their incremental capacity as well as reliability assessment for the entire new configuration.

Special Cases

1. Wind re-powering may require a different methodology for determining RA capacity, perhaps the exceedance methodology currently used.
2. Conversions from distribution to transmission interconnection. Could be a problem, potentially impacting deliverability from other resources, if transmission intertie location changes (e.g., distribution tie connects to different transmission line than new interconnection).
3. Technology changes – what if re-power is to totally different resource type (e.g., convert from biomass to solar).
4. Increase connected capacity without initial added deliverability (could GIP be used in future years to increase deliverability rating?)

SCE Straw Proposal to be added to GIP2 Stakeholder Process
Submitted by: Gary Holdsworth for SCE
April 12, 2011

A. Background:

SCE believes that it is necessary, given the issues that are currently on the table with respect to the CAISO's Generation Interconnection Reform Round #2 (GIP2) stakeholder process, for the CAISO and stakeholders to address several issues that surround the participating transmission owner's (PTO's) requirement to upfront finance network upgrades under certain circumstances in the existing GIP.

Any GIP provisions that shift financing responsibility from interconnection customers (ICs) to PTOs mute the price signals that would otherwise be given to alert ICs of the true cost of transmission interconnection. These provisions can also impact the amount of interconnection financial security required to be posted by ICs, the amount of transmission financed by ICs, and the amount ultimately recovered through transmission rates. SCE believes that the interests of generation developers, transmission owners, and ratepayers are all aligned when it comes to ensuring that the "right amount" of transmission is built to meet California's energy goals, so that this transmission is appropriately sized, securitized, financed, and recovered.

B. Issues:

The structures in the current GIP, TPP, and GIA that are the source of SCE's concerns are briefly listed here and are further addressed below:

1. Phase I Cost Cap (found in Section 7.3 and 7.4 of the GIP)
2. Base Case Provision (found in Section 12.2.2 of the GIP)
3. GIP-driven upgrades subject to "up-sizing" in the Annual Transmission Planning Process (found in TPP, Section 24.4.6.5 of the Tariff)
4. Suspension provision within pro-forma GIA (found in Article 5.16 of the pro-forma GIA)

Phase I Cost Cap

The Phase I Cost Cap requires PTOs to finance network upgrades at any time after the Phase I study, for the amount that actual costs exceed the Phase I Cost Cap. The Cost Cap provision serves a worthwhile and valuable purpose, in that it provides a level of cost certainty to the interconnection customers at an early stage of the interconnection study process. However, as experience has been gained with the cost caps as implemented in the interconnection procedures, it has become apparent how the cost cap provisions can create unintended consequences, such as requiring PTOs to upfront finance large dollar network upgrades, where perhaps the remaining underlying generation would not require such large upgrades. SCE believes that the ability to make appropriate modifications to the Plan of Service that is ultimately constructed will benefit all parties. The "up-sizing" of network upgrades in the Annual Transmission Planning Process (TPP) likewise falls into an area of concern for PTOs, because the financial responsibility of such upsized upgrades invariably fall to PTOs because of the Phase I Cost Caps.

Base Case Provision

The Base Case provision requires PTOs to upfront finance network upgrades if the interconnection requests that require the upgrades are withdrawn at any time following the

Phase I interconnection study, but the network upgrades are still required for future generation in future queue clusters (and there is no re-study provision or other way to modify the Plan of Service to adjust for the withdrawing generation). This provision increases IC's financial certainty, but also has the potential to create extra financing requirements for PTOs. Similarly, the ability of an IC to suspend the generation interconnection agreement (GIA) for up to three years acts as an extension of this Base Case provision, because the suspension right also adds to the financing risk for PTOs in cases where the upgrades triggered by the suspending customer(s) are required/relied on by future generation and are therefore reflected in the base case(s) of future cluster studies.

C. Straw Proposal

SCE is seeking to include a re-evaluation of these structures within in the scope of the GIP2 stakeholder effort currently underway. SCE expects some stakeholder unease with portions of this proposal, but also believes that once all aspects of SCE's proposal are fully vetted, stakeholders will more likely support SCE's proposal. In fact, certain stakeholders have already requested the ability to re-evaluate Plans of Service after the Phase II studies are complete. If such re-evaluations lead to smaller or less expensive Plans of Service, the developers want their GIAs and interconnection financial security to be adjusted accordingly. SCE supports this viewpoint; as long as PTO's financial requirements are likewise adjusted downwards, if warranted.

Thus, SCE's proposal to the GIP2 stakeholders is as follows:

- 1) Eliminate the suspension ability from the pro-forma GIA
 - 2) Retain the current Cost Cap and Base Case provisions, but mitigate the financing and cost recovery risks that PTOs face through two primary modifications to the GIP:
 - a) Add the ability for PTOs to request a re-evaluation of the post-Phase II Plan of Service, and
 - b) Add to the GIP a provision whereby the PTO has pre-approved eligibility for 100% abandoned plant cost recovery for the network upgrades that the PTO is required to upfront finance due to the GIP provisions of the CAISO Tariff.
- Further development of this proposal is expected as part of the CAISO GIP2 stakeholder process.

D. Explanation of Needed Modifications to GIP Need for post-Phase-II Re-evaluation of the Plan of Service

SCE believes much of the financing risk associated with the Base Case and Cost Cap provisions could be reduced to a more manageable level through the use of a post-Phase II re-evaluation of the Plan of Service for interconnecting generators. Plans of Service may require reevaluation for various reasons, and may require more than one such re-evaluation during the upgrade's development cycle. Moreover, each set of network upgrades is usually required to go through the transmission licensing process, which will inevitably alter the Plan of Service in some way. It is only after the completion of the licensing process and the finalization of the construction plan that it is possible to determine the nature and extent of the transmission facilities that will actually be constructed.

Generation developers have requested the ability to revise their financial responsibility and interconnection financial security (IFS) posting requirements should changes to the Plan of

Service occur and SCE is likewise seeking to rationalize the Plans of Service and the attendant financing responsibility that could accrue to PTOs under certain circumstances, so that the “right” amount of transmission is eventually constructed.

The current GIP is silent on the ability to re-evaluate a Plan of Service after Phase II study is completed. However, one could argue that the existing GIP does not preclude such a reevaluation, but there are currently no details as to how such a re-evaluation would be implemented. Therefore, SCE believes that the GIP should be modified to provide PTOs the ability to seek re-evaluation of the Plan of Service after the Phase II study, if the PTOs believe such a re-evaluation is appropriate and/or necessary. Included in this 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. SCE is proposing that such a decision to remove upgrades from the base case will require concurrence between the PTO and the CAISO. The focus of the post Phase II re-evaluation would be network upgrades, but some collateral change to distribution upgrades or interconnection facilities might occur as result of network re-evaluation. Any re-sizing of the Plan of Service that results in changes to PTO and IC financial responsibility, including posting requirements for interconnection financial security, will likewise require amendment of the GIA(s) to reflect the changes.

Need for Abandoned Plant eligibility provisions in CAISO Tariff

As most stakeholders are aware, SCE has in several cases voluntarily agreed to upfront finance network upgrades. In each case, SCE has made these financial commitments contingent on receipt of 100% abandoned plant cost recovery assurance from FERC. The CAISO has supported SCE’s seeking abandoned plant assurances. SCE believes that its requirement to upfront finance network upgrades that come from the Cost Cap, Base Case, and upsizing provisions for GIP-driven upgrades in the TPP should likewise be contingent on receipt of 100% abandoned plant cost recovery assurance from FERC. However, SCE is concerned that, among other things, the financing requirements created by the Cost Cap, Base Case, and TPP provisions might lead to upgrades being financed by PTOs, that would be viewed by FERC as “routine” and therefore would not be found eligible for the 100% abandoned plant incentive. Therefore, SCE believes that a provision should be added to the CAISO Tariff that pre-approves eligibility for 100% abandoned plant cost recovery for amounts of network upgrades that the PTO is required to upfront finance as a result of the GIP provisions in the CAISO Tariff.

Elimination of ability to suspend GIA

Currently, Article 5.16 of the pro-forma GIA includes the ability for the interconnection customer to suspend provisions of the GIA for up to three years. This ability creates the untenable situation of placing needed transmission upgrades essentially in limbo until the party ends the suspension. In a cluster study process, the suspension can cause delays in constructing upgrades that are required for non-suspending parties. This situation needs to be remedied immediately, and the best way SCE sees in remedying it is to eliminate the ability for participants in the cluster study process to suspend the GIA. The suspension issue similarly impacts the base case for future clusters, which is addressed separately herein, but eliminating the ability to suspend would also eliminate the questions over what happens to upgrades that are held up by suspending ICs that may be required for future queue clusters.