# Interconnection Process Enhancements

# Issue Paper

June 3, 2013

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## Issue Paper

# 1 Executive summary

The Interconnection Process Enhancements ("IPE") initiative is the latest in a series of stakeholder processes that the ISO has conducted over the past several years to continuously review and improve its generation interconnection procedures ("GIP").[1] The ISO launched the IPE initiative with the issuance of a scoping proposal on April 8. The scoping proposal accomplished two steps: first, it assembled a comprehensive list of potential GIP-related topics for consideration in this initiative; and second, it selected twelve topics from the comprehensive list of topics for proposed inclusion in the scope of the IPE initiative.

Following release of the April 8 scoping proposal, the ISO held a stakeholder web conference on April 22 and received written comments from stakeholders on April 30. Overall, stakeholder feedback was positive and indicated that the ISO's initial proposed scope of twelve topics represents a high priority set of topics to a broad spectrum of stakeholders. Based on this feedback, the ISO has concluded to move forward with its proposed scope of twelve topics and addresses them in this issue paper.

However, stakeholders also indicated that there are additional topics that should be included in the scope of this initiative. After giving this careful consideration and also factoring in that additional topics would trigger a net increase in workload beyond what the ISO had planned for this initiative, the ISO is proposing that the scope be expanded to accommodate four additional topics without eliminating any of the original twelve topics. The ISO is further proposing to incorporate one of the four additional topics into one of the initially proposed twelve. Thus, this would result in a net total of fifteen topics in scope. On the positive side this will increase the number of topics being addressed in this initiative; but, on the negative side it will increase the overall effort in this initiative by approximately 25%. The ISO will manage this additional workload by staging the presentation of proposals on the fifteen topics across more than one ISO Board meeting.

The ISO anticipates that the pace of development of straw proposals for each topic may differ—i.e., straw and final proposals for some topics may be developed rather quickly whereas more time may be needed to work with stakeholders and develop straw and final proposals for other topics. To facilitate the process, for some topics the ISO goes beyond the issue analysis stage in this issue

[1] Technically the "GIP" refers to Appendix Y of the ISO tariff, which governs the interconnection procedures for

paper and offers an initial straw proposal (for example, see queue management topics #6-12). For these topics, the ISO requests that stakeholders provide feedback on these initial straw proposals. On others, the ISO only suggests options at this time (for example, see topic #1 on future downsizing policy). On those topics for which the ISO is not yet prepared to offer an initial straw proposal, the ISO requests that parties provide proposals, through their written comments, in order to begin the process to develop straw proposals for each topic.

The ISO anticipates that final proposals on the various topics in this initiative may be completed in stages. For example, the pace of work on the queue management topics (e.g., topics #6-12) may be such to enable the resulting proposals on these topics to go to the ISO Board for approval earlier than the non-queue management topics in this initiative. The ISO expects that some of the non-queue management topics will be sufficiently resolved by the fall of 2013 to take the resulting proposals to the ISO Board in December for approval. For example, the ISO is targeting the December 2013 Board meeting for at least two non-queue management topics – future downsizing policy and risk of disconnection – and intends to adjust work on the remaining topics as necessary to help meet this goal. Lastly, an ISO Board meeting in the first or second quarter of 2014 will be targeted for those topics requiring additional time. For example, the ISO is anticipating that topic #4 (improving the independent study process), topic #5 (improving the fast track process), and topic #14 (distribution of forfeited funds) will require additional time and therefore be presented at a 2014 Board meeting. However, despite the intent to complete the topics in stages, all topics within the scope of this initiative will be addressed from the start to allow as many topics as is feasible to be completed within 2013.

The ISO will hold a stakeholder meeting on this issue paper on June 11 and receive written stakeholder comments on June 25. Following this second round of stakeholder engagement, the ISO plans to issue a straw proposal in July and, for those topics sufficiently developed, a draft final proposal in September. Beyond that, additional proposal papers will be issued as needed for those topics likely to be presented to the ISO Board in 2014.

# 2 Introduction

California's ambitious renewable portfolio standards and environmental goals have resulted in significant development of new generation projects in recent years, especially new renewable solar and wind projects. The majority of these projects request interconnection to facilities under the operational control of the ISO.[2] For projects that entered the ISO queue prior to 2012 (i.e., up to and including Cluster 4), interconnection to the ISO grid is governed by the tariff provisions

[2] Some projects request interconnection to the distribution systems of the participating transmission owners through their wholesale distribution access tariff ("WDAT").

encompassed by the ISO's generator interconnection procedures ("GIP").[3] Successful completion of the interconnection process is a necessary step in the development of a new generation project and is but one of the many challenges faced by generation developers.

The ISO is committed to continuously reviewing potential enhancements to its GIP to reflect changes in the industry and to better accommodate the needs of interconnection customers. As a demonstration of this commitment, the ISO has conducted a series of stakeholder processes over the past several years to improve the GIP. These include Generation Interconnection Process Reform ("GIPR") held in 2008-09, Generation Interconnection Procedures Phase 1 ("GIP 1") in 2010, Generation Interconnection Procedures Phase 2 ("GIP 2") in 2011 and early 2012, and Generation Interconnection Procedures Phase 3 ("GIP 3") in 2012[4].

The ISO launched the latest in this series of stakeholder processes to review and improve the GIP when it issued the Interconnection Process Enhancements initiative ("IPE") scoping proposal on April 8.[5] Rather than the usual sequence of beginning the initiative with an issue paper, the ISO identified the development of a scoping proposal as a necessary first step. Its purpose was twofold. First, it assembled a comprehensive list of potential topics in one place from a number of sources including:

- During the course of last year's GIP 3 stakeholder process a list of twenty-seven potential topics (including generator project downsizing) were compiled for consideration.
- Outside of the GIP stakeholder process, individual stakeholders have suggested GIP-related topics to the ISO over the past year.
- At the September 2012 ISO Board of Governors meeting, ISO Management committed to include two topics in the scope of this initiative in response to stakeholder interest: (1)

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[3] For projects entering the ISO queue in 2012 or later (i.e., starting with ISO queue Cluster 5), interconnection to the ISO grid is governed by the new Generator Interconnection and Deliverability Allocation Procedures ("GIDAP") approved by FERC in 2012. The present IPE initiative is intended to focus primarily on the rules governing projects in cluster 4 and earlier, as the ISO is now only partway through the first implementation cycle of the GIDAP and is not yet ready to consider changes to the GIDAP. In the event that a proposed enhancement to the GIP under this initiative appears to be appropriate to extend to the GIDAP, the ISO will consider whether extension of the enhancement to GIDAP would have any unintended consequences on the GIDAP, and if not we would support such extension. The present initiative is not intended, however, to entertain changes specifically targeted to the GIDAP.

[4] GIP 3 was started in early 2012 but later deferred while the generator project downsizing initiative was pursued. In GIP 3 the ISO solicited stakeholder comments on the relative priority of issues that should be considered, on generator project downsizing as well as on a couple dozen other topics. The ISO explained that a limited number of topics would be included in the initial stakeholder effort to ensure timely resolution and implementation. Stakeholders expressed broad support for only one topic, the extent to which an interconnection customer could downsize the MW capacity of its proposed generating facility and retain its queue position (i.e., generator project downsizing). As a result of this stakeholder feedback, the ISO deferred work on the other topics that did not receive such broad support and focused efforts on generator project downsizing through a separate stakeholder initiative.

[5] http://www.caiso.com/Documents/ScopingProposal-InterconnectionProcessEnhancements.pdf

future generator project downsizing policy, and (2) disconnection of an initial project phase of a generation project for failure of the project to complete a subsequent phase.

- An ISO internal need to improve the queue management process and topics were added to effectuate these changes.

Second, the scoping proposal selected a set of potential GIP-related topics from the comprehensive list of topics mentioned above for proposed inclusion in the scope of the IPE initiative. This was necessary because the comprehensive list of topics (nearly fifty topics in total) represented a far larger set of topics than could be reasonably addressed within the scope of this initiative. To develop a subset of topics representing a more reasonable workload to include in the scope of this initiative, the ISO took into consideration the estimated the level of effort and relative priority associated with each topic as well as its contribution to queue management efforts. This resulted in twelve topics that the ISO proposed in the April 8 scoping proposal for inclusion in the scope of the IPE initiative.[6]

Table 1 provides a summary of these twelve topics along with an estimated level of effort for each. If the topic received a composite score in the March 2012 survey conducted during GIP 3, then that is also provided. The ISO included seven topics in the initial scope (topics #6-12) centered on more efficient queue management.

**Table 1 – Topics initially proposed to be in scope in the April 8 Scoping Proposal**

| Topic No. | Topic Description | Estimated level of effort | March 2012 survey score (scale: 1 to 3) |
|---|---|---|---|
| 1 | Future downsizing policy | High | 2.10 |
| 2 | Disconnection of first phase of project for failure of second phase | High | 1.88 |
| 3 | Clarify tariff and GIA provisions related to dividing up GIAs into multiple phases or generating projects | Medium | 1.88 |
| 4 | Improve the Independent Study Process | Medium | 1.50 |
| 5 | Improve the Fast Track Process | Medium | 1.43 |

[6] The remaining topics, which the ISO did not initially recommend be in scope, are described in section 4 of the April 8 scoping proposal.

| Table 1 – Topics initially proposed to be in scope in the April 8 Scoping Proposal | | | |
|---|---|---|---|
| **Topic No.** | **Topic Description** | **Estimated level of effort** | **March 2012 survey score (scale: 1 to 3)** |
| Queue Management Topics | | | |
| 6 | Provide for ability to charge customer for costs for processing a material modification request | High | n/a[7] |
| 7 | COD modification provision for SGIP projects | Medium | n/a |
| 8 | Length of time in queue provision for SGIP projects | Low | n/a |
| 9 | Clarify that PTO and not ISO tenders GIA | Low | n/a |
| 10 | Timeline for tendering draft interconnection agreements | Low | 1.43 |
| 11 | LGIA negotiations timeline | Medium | 1.21 |
| 12 | Consistency of suspension definition between serial and cluster | Low | n/a |

The ISO explained in the April 8 scoping proposal that the initially proposed scope of twelve topics and the associated overall level of effort represented a manageable workload but would likely require that this scope of topics be completed in two stages. The ISO invited stakeholders to comment on the initial proposed scope of twelve topics and suggest whether any of these remaining topics should replace topics in the initial proposed scope without triggering a net increase in either scope or workload. The ISO further explained that any remaining topics would serve as the starting point for a subsequent interconnection process enhancements initiative.

# 3 Stakeholder feedback on the April 8 scoping proposal

Following release of the April 8 scoping proposal, the ISO held a stakeholder web conference on April 22 and received written comments from stakeholders on April 30. Overall, stakeholder feedback was positive and indicates that the ISO's initial proposed scope of twelve topics represents a high priority set of topics to a broad spectrum of stakeholders.

Table 2 provides a high level summary of stakeholder feedback on the topics initially proposed to be in scope in the April 8 scoping proposal.

[7] Topics 6 -9 and 12 were not topics previously identified in GIP 3 and thus did not receive a composite score in the March 2012 survey conducted during GIP 3. However, these are topics that have been identified as part of the ISO's queue management efforts.

| Topic No. | Topic Name | Stakeholders in support of a topic's inclusion |
|---|---|---|
| 1 | Future downsizing policy | High priority for LSA, CalWEA, AES Solar, NRG Energy. PG&E open to considering annual downsizing process. Wellhead does not oppose additional downsizing flexibility. |
| 2 | Disconnection of first phase of project for failure of second phase | High priority for LSA, CalWEA, AES Solar, NRG Energy. PG&E open to considering 'safe harbor' provisions for built phases. |
| 3 | Clarify tariff and GIA provisions related to dividing up GIAs into multiple phases or generating projects | High priority for LSA, AES Solar, NRG Energy. PG&E open to reasonable degree of additional phasing flexibility. SCE supports inclusion in scope. |
| 4 | Improve Independent Study Process | High priority for Clean Coalition, CalWEA, Wellhead. The ISO is proposing to include behind the meter expansion in this topic, a high priority for CalWEA. |
| 5 | Improve Fast Track process | High priority for Clean Coalition, CalWEA, Wellhead. |
| 6 | Provide for ability to charge customer for costs to process a material modification request | High priority for LSA, PG&E. SCE supports inclusion. BAMx and IEP support inclusion of all queue management topics. |
| 7 | COD modification provision for small generator projects | PG&E supports inclusion. BAMx and IEP support inclusion of all queue management topics. |
| 8 | Length of time in queue provision for small generator projects | PG&E and Clean Coalition supports inclusion. BAMx and IEP support inclusion of all queue management topics. |
| 9 | Clarify that PTO and not ISO tenders GIA | BAMx and IEP support inclusion of all queue management topics. |
| 10 | Timeline for tendering draft interconnection agreements | High priority for SCE. PG&E supports inclusion. BAMx and IEP support inclusion of all queue management topics. |
| 11 | LGIA negotiations timeline | High priority for LSA, SCE, NRG Energy. BAMx and IEP support inclusion of all queue management topics. |
| 12 | Consistency of suspension definition between serial and cluster | BAMx and IEP support inclusion of all queue management topics. |

**Table 2 – Stakeholder feedback on the initial proposed scope in the April 8 scoping proposal**

Overall, the ISO views this stakeholder feedback as generally supportive of the initial proposed scope of twelve topics. Based on this support, the ISO has concluded to move forward with the proposed scope of twelve topics. Several stakeholders requested that the ISO combine topics 1-3 into a single topic, based on the recognition that resolution of each one of these topics will affect some aspects of the other two. The ISO has decided to keep the three topics separate for purposes of developing proposals, in view of the fact that each topic contains multiple sub-issues that must be addressed individually anyway. This approach will not prevent us from properly considering the inter-relations among the topics and sub-issues.

Stakeholder feedback also indicated that there are additional topics of high priority to stakeholders. Stakeholders requested that the ISO consider these additional topics for possible inclusion in the scope of the IPE initiative. The ISO gave careful consideration to these requests despite the fact that including additional topics would trigger a net increase in workload beyond what is viewed as manageable. Based on a review of these stakeholder suggestions, the ISO has identified a four additional topics that it has added to the scope for the IPE initiative. These are summarized in Table 3.

**Table 3 – Additional topics in scope**

| Topic No. | Topic Name | Stakeholders in support of a topic's inclusion |
|---|---|---|
| New (#13) | Clarity regarding timing of transmission cost reimbursement.<br>Note: The ISO has already addressed, and FERC has ruled on, this issue with respect to existing tariff requirements for the timing of transmission cost reimbursement. The ISO agrees, however, to consider as part of this initiative whether, going-forward for Cluster 6 or 7 depending upon timing of FERC approval, cost reimbursement for network upgrades should require both that a generator have achieved commercial operation and that the network upgrades are in service. | High priority for LSA, SCE. |
| New (#14) | Distribution of forfeited funds.<br>Note: Current policy is for forfeited funds go to the scheduling coordinators for load serving entities (i.e., funds go to load serving entities based on load share). However, some stakeholders (generator interconnection customers) would prefer that these funds were used to offset costs of interconnection. | High priority for LSA, PG&E. |
| New (but will be incorporated into topic #4) | Behind the meter expansion.<br>Note: This will be added to the scope of topic #4 ("Improve Independent Study Process") rather than as a standalone topic. | High priority for CalWEA. |
| New (#15) | Inverter/transformer changes.<br>Note: This topic will attempt to clarify the material modification process and any "non-material" changes related to potential modifications of a project in queue. | High priority for Clean Coalition. PG&E open to consideration of this topic. |

The ISO is proposing that the scope be expanded to accommodate these four additional topics without eliminating any of the original twelve topics. The ISO is further proposing that one of the four additional topics—behind the meter expansion—be incorporated into topic #4 (improving the Independent Study Process) rather than treated as a standalone topic. Thus, this would result in a net total of fifteen topics in scope. On the positive side this will increase the number of topics being addressed in this initiative. On the negative side it will increase the overall effort in this initiative by approximately 25%. The ISO will manage this additional workload by staging the various topics and by limiting the number of topics targeted for the various Board meetings to a reasonable number.

# 4 Stakeholder process next steps

The purpose of this issue paper is to identify and analyze the issues associated with each of the fifteen topics in scope and for some topics offers a straw proposal or suggests options. Following publication of this issue paper, the ISO will invite stakeholder feedback on the issues associated with each of the fifteen topics. This is a critical step to help ensure that all relevant issues are considered in the next phase of this initiative—the development of straw proposals for each topic – to the extent that straw proposals are not identified in this issue paper.

As explained in the April 8 scoping proposal, the ISO anticipates that the pace of development of straw proposals for each topic may differ—i.e., a straw proposal for some topics may be developed rather quickly whereas more time may be needed to work with stakeholders and develop straw proposals for other topics. Toward this end, for some topics the ISO goes beyond the issue analysis stage in this issue paper and offers an initial straw proposal (for example, see topics #6-12). For these topics, the ISO requests that stakeholders provide feedback on these initial straw proposals. On others, the ISO stops short of recommending a straw proposal but instead suggests options (for example, see topic #1). On those topics for which the ISO is not yet prepared to offer an initial straw proposal, the ISO requests that parties provide, through their written comments, proposals for how to address the issues identified in order to begin the process of working with stakeholders to develop straw proposals for each topic.

The ISO anticipates that final proposals on the various topics in this initiative may be completed in stages. For example, the pace of work on the queue management topics (e.g., topics #6-12) may be such to enable the resulting proposals on these topics to go to the ISO Board for approval earlier than the non-queue management topics in this initiative. The ISO expects that some of the non-queue management topics will be sufficiently resolved by the fall of 2013 to take the resulting proposals to the ISO Board in December for approval. For example, the ISO is targeting the December 2013 Board meeting for at least two non-queue management topics – future downsizing policy and risk of disconnection – and intends to adjust work on the remaining topics as necessary to help meet this goal. Lastly, an ISO Board meeting in the first or second quarter of 2014 will be targeted for those topics requiring additional time. For example, the ISO believes that topic #4 (improving the independent study process), topic #5 (improving the fast track process), and topic #14 (distribution of forfeited funds) will require additional time and therefore be presented at a 2014 Board meeting.

However, despite the intent to complete the topics in stages, all topics within the scope of this initiative will be addressed from the start to allow as many topics as is feasible to be completed within 2013.

Table 4 provides a summary of the anticipated stakeholder process schedule for the IPE initiative leading to a December 2013 ISO Board meeting. Table 4 does not contain schedule details reflecting the possibility that proposals on the queue management topics could go to a Board meeting prior to December nor does it provide the subsequent steps leading to a 2014 Board meeting for any remaining topics. The ISO will work with stakeholders to develop these schedule details and update the stakeholder process schedule as work on the various topics progresses.

**Table 4 – Stakeholder process schedule**

| Step | Date | Milestone |
|---|---|---|
| Scoping proposal | April 8 | Post scoping proposal |
| | April 15 | Stakeholder meeting (web conference) |
| | April 22 | Stakeholder comments due |
| Issue paper | June 3 | Post issue paper |
| | June 11 | Stakeholder meeting (web conference) |
| | June 25 | Stakeholder comments due |
| Straw proposal | July 18 | Post straw proposal |
| | August 8 | Stakeholder meeting (in person) |
| | August 22 | Stakeholder comments due |
| Draft final proposal | September 12 | Post draft final proposal |
| | September 19 | Stakeholder meeting (web conference) |
| | October 3 | Stakeholder comments due |
| Board | December 18-19 | Board of Governors meeting |

# 5 Topics

This section discusses the issues associated with all fifteen topics in scope, and for some of the topics, offers either options or an initial straw proposal to address the issues identified. The ISO invites stakeholders to provide feedback on the issues identified as well as on the options or straw proposals offered, as applicable. For some topics, the ISO has included specific questions that stakeholders are requested to address in their comments.

## 5.1 Future downsizing policy

To lay the groundwork for this topic, a discussion of the background, existing downsizing opportunities, and the one-time downsizing opportunity approved by FERC in 2012 are discussed in sections 5.1.1 and 5.1.2 and 5.1.3, respectively. Following that, recent stakeholder comments on this topic are summarized in section 5.1.4. Lastly, in section 5.1.5 the ISO suggests options for stakeholder consideration and feedback in their written comments.

### 5.1.1 *Background*

Generator project downsizing has been a topic of significant interest to generation developers in recent years. The state's renewable policy goals have resulted in significant development of new renewable solar and wind projects. The design of these projects is often scalable, and, as a result, the developer may, for a number of reasons, find it desirable or necessary to reduce the size of the project from what was originally proposed in their interconnection request. The reasons often cited for their need to downsize include the inability to secure a power purchase agreement for the full amount of the project, specific terms in their power purchase agreements, or reasons that may be beyond the control of interconnection customers such as the inability to obtain permitting and governmental approvals for the full capacity that was studied. In any case, interconnection customers have indicated that they may find themselves in a situation where the project size in their original interconnection request may be too large, thereby impeding their ability to comply with the requirements of their interconnection agreement.

While interconnection customers in the ISO interconnection queue already have existing opportunities to downsize, they have continued to express an interest in an additional mechanism to downsize their project. This interest resulted in development of the one-time downsizing opportunity approved by FERC in late 2012 and which is currently being implemented by the ISO (see section 5.1.3).

### 5.1.2 *Existing downsizing opportunities*

This section lists the existing downsizing opportunities available to customers prior to the one-time downsizing opportunity approved by FERC in 2012 and which continue to be available today.

1. Downsizing during interconnection studies when all parties agree. An interconnection customer that wants to make a change to the megawatt capacity of its generation project can do so during the interconnection study process if the proposed change is acceptable to all parties (with consent to such changes not to be unreasonably withheld).[8]
2. Downsizing through a "material modification" review. After the interconnection study process has concluded an interconnection customer may seek to downsize or make other

[8] It should be noted that this change only allows for a downsizing and does not allow for an increase in capacity.

changes to its project. However, such modification requests are subject to a material modification review on a project-by-project basis in order to determine whether granting the requested modification would have a material impact on the cost or timing of later-queued interconnection requests. If the requested modification would not have such an impact, then the ISO will grant the request. If there is a material impact, then the modification request will be denied, and in such instances there are no provisions whereby which the interconnection customer can mitigate the material impact. Given the number of interconnection customers and the interdependencies of the projects in the ISO queue, it is highly unlikely that many projects requesting to downsize would be able to pass the material modification review. (In contrast, the ISO has approved many material modification review requests for projects not seeking to downsize.)

3. <u>Safe-harbor downsizing opportunity.</u> The *pro forma* large generator interconnection agreement, in effect as of January 31, 2012, contains a "safe-harbor" provision under which an interconnection customer may reduce the MW capacity of its generating facility by up to five percent for any reason, up until its commercial operation date, and may request authorization from the ISO to reduce the MW capacity of its generating facility by more than five percent under limited conditions where the interconnection customer reasonably demonstrates that the more-than-five-percent reduction is warranted due to any of three specified reasons beyond the control of the interconnection customer:
    - Failure to secure required permits and other governmental approvals to construct the generating facility at its total MW generating capacity specified in the interconnection request after making diligent efforts.
    - Written statement from the permitting or approval authority indicating that construction of the facility at the total MW size specified in interconnection request will likely result in disapproval due to significant environmental or other impact that cannot be mitigated.
    - Failure to obtain legal right to use the full site acreage necessary to construct/operate the total MW generating capacity size for the entire generating facility after making diligent efforts (only applies where an interconnection customer previously demonstrated and maintained its demonstration of site exclusivity for the full acreage required for the project).
4. <u>Use of non-conforming "partial termination" provision.</u> The ISO has filed and obtained FERC acceptance of four non-conforming generator interconnection agreements that include "partial termination" provisions allowing customers that are building generating facilities with multiple phases to invoke partial termination of their generator interconnection agreements with regard to later phases without breaching the generator interconnection agreements and without adverse impacts on the earlier phases. The partial termination

provisions were developed in 2010 to address the unique circumstances of these interconnection customers. In each case, the construction of the final segments of the network upgrades for their phased generating facilities required at least three years past the requested in-service date and in some instances an extremely long lead time – 84 months – resulting in significant commercial uncertainty as to whether the developer could find a counterparty for the generating capacity that could not be interconnected or would not be deliverable until the upgrades were built.

The ISO continues to consider partial termination provision for cluster and serial projects that are similarly situated to the projects that were subject to the four earlier non-conforming agreements approved by FERC. Specifically, the ISO will consider the inclusion of partial termination provisions in the interconnection agreement of a cluster or serial project meeting the following criteria:

1. Total project size is at least 50 MW;
2. Project will be developed in phases;
3. The PTO will require three or more years, from the customer's requested in-service date of the first phase, to build the required transmission;[9]
4. There is no material impact to later queued customers;
5. The customer agrees to post security for, and pay if partial termination is exercised, a partial termination charge, the amount of which is determined by the ISO to be proportional to the risk of stranded transmission infrastructure investment if the customer exercises the partial termination by cancelling a later phase of the project.

### 5.1.3 *One-time downsizing opportunity*

Generator project downsizing was a topic suggested by stakeholders in GIP 3 and received the highest score in the March 2012 stakeholder survey in that initiative. In response to this stakeholder demand, in 2012 the ISO deferred work on the other topics in GIP 3 and instead focused its efforts on a separate stakeholder initiative to explore the possible expansion of opportunities for generator interconnection customers prior to Cluster 5 (see feature number 2 discussion below) to downsize the MW capacity of their proposed generating facilities. The ISO worked with stakeholders over the course of 2012 and developed a one-time opportunity for all customers in the ISO's interconnection queue that entered the queue prior to Cluster 5 to downsize their projects. Tariff amendments to implement this one-time downsizing opportunity were filed with FERC on October 26, 2012. The FERC approved the ISO's proposal on December 20, 2012. The FERC found that the one-time downsizing opportunity:

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[9] As defined in the GIA, **In-Service Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Participating TO's Interconnection Facilities to obtain back feed power.

- provides a balanced approach to eliminate non-viable requests from the ISO's interconnection queue, while protecting non-downsizing customers from harm;
- is responsive to requests from affected interconnection customers for an opportunity to downsize their projects in addition to the ISO's existing downsizing options;
- will help facilitate completion and commercial operation of projects that would be viable but for an inability to construct the full generating capacity stated in the customers' interconnection requests;
- will help ensure that more projects can achieve commercial operation, even though at a smaller scale than originally planned; and,
- will help spur energy development and advance ISO's efforts to reduce non-viable interconnection requests from its queue.

The FERC also found:

- the cost cap on downsizing generators' study deposits to be reasonable; and,
- that downsizing generators should bear the costs of their downsizing on all impacted generators, regardless of whether the impacted generator is connected to the ISO-controlled grid or to the distribution system of one of the PTOs.

The ISO's one-time downsizing opportunity has the following features:

1. One-time opportunity. The new downsizing opportunity was offered as a one-time option. Established a one-time window for developers to submit a downsizing request to permit transmission planning engineers to evaluate the collective impacts of all requests. Requires a $200,000 deposit to help defray costs incurred by the ISO and the participating transmission owners to process the requests.
2. Limited to pre-Cluster 5 customers. This was done for several reasons. First, at the time of the ISO's filing, customers in Cluster 5 had not yet received their Phase I interconnection study reports, and so still had the opportunity to downsize before entering Phase II. Second, customers in Cluster 5 would possibly have the opportunity to downsize again after receiving results of the transmission plan deliverability allocation pursuant to GIDAP.[10] Even after these downsizing opportunities, Cluster 5 customers will be able to avail themselves of the "safe harbor" provisions described earlier. Finally, it was premature to consider

[10] The ISO's generation interconnection and deliverability allocation procedures (GIDAP) tariff amendment, which was approved by FERC on July 24, 2012, includes several new provisions to allow customers in Cluster 5 and beyond to downsize their projects.

substantive changes to the GIDAP rules, which had just been approved by FERC and were in the early stage of their first implementation.

3. Downsizing study utilized to assess impacts of downsizing requests. The ISO would conduct a downsizing study to determine the impacts of the downsizing requests on the current customer interconnection plans of service developed through their earlier interconnection studies. The study process will be substantially the same as the ISO's existing cluster study process. The costs of the downsizing study, and any resulting interconnection agreement amendments, would be borne by customers requesting downsizing.
4. Withdrawal opportunities provided. Downsizing generators are given two "off-ramp" opportunities to withdraw from the downsizing effort. If they do not withdraw, they will be committed to downsizing. First, each downsizing generator will have an opportunity to withdraw its generator downsizing request after being given a preliminary estimate of its obligation for downsizing study costs. There will be a second opportunity to withdraw for each downsizing generator notified by the ISO that the generator's preliminary study results show that its estimated responsibility for network upgrade costs may significantly increase. The ISO expects this circumstance to be rare.
5. Original cost allocations determine the cost assignment for refreshed configurations. If the downsizing requires the upgrades to be modified or substituted, the resulting costs are to be assigned in proportion to downsizing customers' responsibility for the costs of the original upgrades, thus preserving the original allocation of costs among interconnection customers in the queue.
6. Protection for customers who are affected but not downsizing. So that non-downsizing interconnection customers are left no worse off with regard to upgrade costs as a result of the decision of other customers to utilize this one-time opportunity to downsize, downsizing-related cost increases or cost shifts to non-downsizing customers will be the responsibility of the downsizing customers.
7. Obligation to meet milestones. Each downsizing generator will be required to relinquish its suspension rights in return for its opportunity to downsize.

In January 2013 the ISO began implementation of the one-time downsizing opportunity approved by FERC the previous month. Thirteen valid downsizing requests were received representing a downsizing reduction of nearly 4,000 MW. The ISO posted a list of the valid downsizing requests identified by queue position along with a preliminary estimate of study cost in February.[11] None of

[11] The ISO, in consultation with the PTOs, developed a preliminary estimate of the cost to perform the downsizing study for the thirteen valid downsizing requests. This study cost was estimated to be $1,342,000 or $103,231 per downsizing

these projects exercised the first opportunity to withdraw their generator downsizing request after being given the preliminary estimate of its obligation for downsizing study costs. None of these downsizing generators had a second opportunity to withdraw.[12]

The ISO and participating transmission owners anticipate completion of the generator downsizing study in late June 2013. At that time, the ISO will provide a generator downsizing study report to each of the thirteen downsizing generators.

Table 5 provides a summary of the steps and timeframes associated with this one-time generator downsizing process.

**Table 5**

| Step no. | Sequential steps in the generator downsizing process (Including citations to relevant ISO tariff sections) | Timeframe |
|---|---|---|
| 1 | Each downsizing generator submits its generator downsizing request to the ISO. (Appendix GG Sections 2.3, 2.5.1)<br>Each downsizing generator must meet all requirements of good standing of its interconnection request. (Appendix GG Section 2.4(2)) | No later than the generator downsizing request due date, *i.e.*, 5:00 p.m. Pacific time on January 4, 2013 |
| 2 | The ISO notifies each downsizing generator whether its generator downsizing request is deemed complete, valid, and ready to be studied. (Appendix GG Section 2.5.2.1)<br>If the generator downsizing request is not deemed complete, valid, and ready to be studied, the process starts for requesting and providing additional information to address the deficiencies in the generator downsizing request. (Appendix GG Section 2.5.2.2) | No later than 10 business days after the generator downsizing request due date |
| 3 | The ISO issues a market notice when it has posted on its website (1) a listing of valid generator downsizing requests and (2) a preliminary estimate of the aggregate study costs for conducting the generator downsizing study. Issuance of this market notice opens the opportunity for each downsizing generator to withdraw its generator downsizing | Following the generator downsizing request due date, in late January 2013 |

project. In accordance with ISO Tariff Appendix GG, a downsizing generator is responsible for all actual costs incurred in connection with preparing the generator downsizing study and the generator downsizing study reports. A downsizing generator's share of actual study costs is determined by dividing the total amount of actual study costs by the number of valid generator downsizing requests, but is no higher than an amount equal to 150 percent of the downsizing generator's share of the preliminary estimate posted. If the generator downsizing deposit ($200,000) is insufficient to cover the costs for which the downsizing generator is responsible, the ISO will invoice the downsizing generator and such amount will be paid within thirty (30) calendar days of the date of the invoice.

[12] In April, the ISO notified the downsizing generators that it had completed the preliminary analysis for the generator downsizing study and determined that no project participating in the downsizing study would have their cost responsibility increase; therefore, no downsizing project will had a second opportunity to withdraw. Per the CAISO Tariff, Appendix GG Section 5.1 (ii), the Downsizing Generator would have a second opportunity to withdraw when the preliminary results of the Generator Downsizing Study indicated that the Downsizing Generator's cost responsibility for Network Upgrades increased by more than five percent (5%) or five million dollars ($5,000,000), whichever was lower, from its cost responsibility identified in its Interconnection Facilities Study or Phase II Interconnection Study report.

| Table 5 | | |
|---|---|---|
| **Step no.** | **Sequential steps in the generator downsizing process (Including citations to relevant ISO tariff sections)** | **Timeframe** |
| | request pursuant to the information provided in the market notice, *i.e.*, opens the first withdrawal opportunity. (Appendix GG Sections 3, 5.1(i)) | |
| 4 | The ISO tenders a downsizing generator payment obligation agreement to each downsizing generator that has not thus far chosen to exercise the first withdrawal opportunity. (Appendix GG Section 6.1) | No later than 5 calendar days prior to the close of the first withdrawal opportunity as described in step 5 |
| 5 | Close of the first withdrawal opportunity. (Appendix GG Section 5.1(i)) | 8:00 a.m. Pacific time on the sixth business day following issuance of the market notice described in step 3 |
| 6 | Each downsizing generator that chooses not to exercise the first withdrawal opportunity must execute and return its tendered downsizing generator payment obligation agreement to the ISO. (Appendix GG Section 6.1) | Within 5 calendar days after tender of the downsizing generator payment obligation agreement as described in step 4 |
| 7 | The ISO issues a market notice of the anticipated commencement and completion dates of the generator downsizing study. (Appendix GG Section 6.4) | January/February 2013 |
| 8 | The ISO and participating transmission owners perform the generator downsizing technical assessment for the generator downsizing study. (Appendix GG Section 6; Attachment A to Appendix 4 of Appendix GG) | February - April 2013 |
| 9 | The ISO provides written notice to each downsizing generator whose cost responsibility for network upgrades is expected to increase by more than five percent or five million dollars, whichever is lower, from the cost responsibility identified in its interconnection facilities study, Phase II interconnection study report, or generator interconnection agreement. Provision of this written notice opens the opportunity for each downsizing generator that receives such notice to withdraw its generator downsizing request pursuant to the information provided in the notice, *i.e.*, opens the second withdrawal opportunity. (Appendix GG Section 5.1(ii)) | April 2013 |
| 10 | Close of the second withdrawal opportunity. (Appendix GG Section 5.1(ii)) | 8:00 a.m. Pacific Time on the eighth business day following provision of the written notice described in step 9 |
| 11 | The ISO and participating transmission owners complete the generator downsizing study. The ISO provides a generator downsizing study report to each downsizing generator that has not exercised the first or second withdrawal opportunity and to each affected generator. (Appendix GG Section 6; Attachment A to Appendix 4 of Appendix GG) | Late June 2013 |
| 12 | Each downsizing generator may request a generator downsizing study results meeting with the ISO and the applicable participating transmission owner(s). (Appendix GG Section 10) | Within 10 calendar days of receipt of the generator downsizing study report |
| 13 | Each affected generator may request a generator downsizing study results meeting with the ISO and the applicable participating transmission owner(s). (Appendix GG Section 10) | Within 14 calendar days of receipt of the generator downsizing study report |
| 14 | The ISO provides notice of updated posting amounts of interconnection financial security, if necessary, to each downsizing generator and | Within 15 business days of the issuance of the generator downsizing study report |

| Table 5 | | |
|---|---|---|
| **Step no.** | **Sequential steps in the generator downsizing process (Including citations to relevant ISO tariff sections)** | **Timeframe** |
| | affected generator whose cost responsibility for network upgrades and/or participating transmission owner's interconnection facilities changes between its earlier interconnection studies and the generator downsizing study. (Appendix GG Section 12(2)) | |
| 15 | The applicable participating transmission owner(s) and the ISO tenders to each downsizing generator or affected generator a draft amendment to its executed generator interconnection agreement, if necessary, together with draft amended appendices. (Appendix GG Section 13)<br>If the downsizing generator or affected generator has not yet executed a generator interconnection agreement, then the applicable participating transmission owner(s) and the ISO will, if necessary, tender a revised draft generator interconnection agreement with draft appendices. (Appendix GG Section 13)<br>Also, the process subsequent to such tender for providing comments, negotiation, and execution and filing of a revised generator interconnection agreement, or an amendment to an executed generator interconnection agreement, including all timeframes, will be identical to the process set forth in Appendix Y Section 11, or as agreed to by the downsizing generator or affected generator, ISO, and participating transmission owner(s). (Appendix GG Section 13) | Within 30 calendar days after the ISO provides the generator downsizing study report |
| 16 | To the extent that a downsizing generator's cost responsibility for network upgrades or participating transmission owner's interconnection facilities increases or decreases, or an affected generator's cost responsibility for network upgrades or participating transmission owner's interconnection facilities decreases, adjustments to the interconnection financial security to conform to the updated amounts specified in the notice described in step 14 must be made. (Appendix GG Section 12(2)) | Within 30 calendar days after the issuance of the notice described in step 14 |
| 17 | The participating transmission owner and any third parties performing work related to the generator downsizing study on the downsizing generator's behalf must invoice the ISO for such work. (Appendix GG Section 2.12) | Within 75 calendar days of completion of the generator downsizing study |
| 18 | The ISO issues invoices to the downsizing generator based upon the invoices provided to the ISO as described in step 17 and the ISO's own costs for the generator downsizing study. (Appendix GG Section 2.12) | Within 30 calendar days after the invoices are provided to the ISO as described in step 17 |
| 19 | Each downsizing generator that receives an invoice as described in step 18 must pay any invoiced amount not covered by the downsizing generator's generator downsizing deposit. (Appendix GG Sections 2.7, 2.12) | Within 30 calendar days of the date of the invoice |

### 5.1.4 *Stakeholder comments*

A number of stakeholders suggested that topics #1, #2, and #3 should be combined into one topic in this initiative. Although the ISO agrees that these topics have a common basis, the ISO believes that they are sufficiently distinct to merit addressing them as separate topics. Moreover, there is every intention to ensure that the work on these three topics will be coordinated to enhance the outcomes of each individual topic.

**Pacific Gas and Electric Company (PG&E).** PG&E states that it recognizes the commercial benefits of providing a permanent downsizing mechanism, and believes further evaluation and discussion of this topic is warranted, but concerned about the potentially significant disruptions and unintended consequences that downsizing can potentially create for the rest of the queue, queue management processes, and PTO cost responsibility for orphaned upgrades. PG&E is open to considering a controlled process with the following characteristics to minimize disruption to existing processes and to protect ratepayers and the PTOs from cost exposure risk: (1) submittals would occur annually during the queue cluster submission window; (2) downsized generators are studied in a fully integrated way with the annual GIP study process; (3) generators are required to commit to a specified downsized size at the time of application in order to preserve the integrity of cluster study results; (4) generators are charged an adequate fee to cover the annual study, administrative costs, and staff time; (5) each project is limited to a single opportunity to downsize; and, (6) the “hold harmless” principle must be upheld (e.g., generators must continue to bear the cost responsibility for any upgrades required as part of subsequent queue cluster base cases; an upgrade cannot simply be “shifted” to a subsequent cluster or to the PTO; it must completely go away for it to qualify for removal). PG&E would also be open to considering an accelerated downsizing process outside of the cluster study process for generators who agree not to seek removal of network upgrades from their interconnection agreements and adds that in order to protect ratepayers, generators must also agree not to seek cost reimbursement for stranded network upgrades.

**Large-scale Solar Association (LSA).** LSA ranked this topic as number 1 (along with topics #2 and #3). LSA states that developers need more flexibility to adjust their project’s size after interconnection requests are submitted. LSA states that this is because transmission construction has a longer lead time than nearly any other generation project activity (e.g., longer than PPA acquisition, permitting, or financing), the ability to restructure and/or downsize generation projects later is critical to project success. LSA suggests that this needed flexibility could be provided through explicit project downsizing opportunities, e.g., specific studies/windows or incorporating annual opportunities in the cluster-study pre-validation process.

**California Wind Energy Association (CalWEA).** CalWEA ranked this topic as number 1 (along with topics #2 and #3). CalWEA states that establishing a rational process and criteria to allow any generation project in the ISO queue to downsize is not only a reasonably but necessary reform given the reality of the renewable energy supply and demand picture in California and the added emphasis on distributed renewable generation. CalWEA believes that very straight forward criteria could be established by the ISO to allow downsizing to take place on an ongoing basis without significant disruptions. CalWEA further states that if the downsizing project is willing to mitigate the material impact that its downsizing will trigger, then the project should be allowed to downsize. CalWEA believes that clear criteria for material impact mitigation can be readily established as part of this stakeholder process. CalWEA adds that a downsizing project that fails to mitigate for the material impact of its action should be penalized through the forfeiture of its financial security postings and not with termination of the GIA related to the completed portion of the project.

**AES Solar (AESS).** AESS ranked this topic as number 2. AESS believes that additional flexibility is needed to right-size projects after submission of an interconnection request, and in some cases after generator interconnection agreements are executed, as long as the impacts on other projects are mitigated. AESS states that such flexibility could be provided through explicit project downsizing opportunities utilizing downsizing windows/studies or elections in the regular study process. AESS further believes that the mitigation to other projects would be satisfied through full funding of network upgrade financial obligations, even if the scope and size of an interconnection request or generator interconnection agreement was reduced. As was similarly stated by LSA, AESS explains that transmission construction has a longer lead time than nearly any other generation project activity (e.g., longer than PPA acquisition, permitting, or financing) and that the ability to downsize generation projects later is critical to project success.

**Wellhead Electric.** Wellhead does not oppose additional downsizing flexibility but believes that the topic has been addressed and that reasonable options are currently available. Wellhead states that changes to existing tariff downsizing provisions must also address the penalty (discrimination) this creates against projects that followed the rules in effect for their project.

**NRG Energy (NRG).** NRG ranked this topic as number 1. NRG would like to see the ISO's downsizing policy applied to interconnections prior to Cluster 3.

#### 5.1.5 *Future downsizing options*

When the generator project downsizing proposal was brought before the ISO Board on September 13, 2012, the Board directed ISO management to consider whether it was appropriate to provide a future, second downsizing opportunity following the ISO's completion of the interconnection studies for Cluster 5.[13] Pursuant to the Board's direction, the ISO will, within this initiative, work with stakeholders to consider a second downsizing opportunity for pre-Cluster 5 projects. However, the narrow question of whether a second downsizing window should be provided is more properly addressed within the broader question of what the ISO's ongoing downsizing policy for pre-Cluster 5 projects should be more generally. Thus, the purpose of this section is to begin the process of answering this broader question, and to do this in consultation with stakeholders and with the objective of presenting a proposal to the ISO Board later this year.

[13] As of this writing, the interconnection study process for Cluster 5 is not complete. The Phase I interconnection studies have been completed, but the Phase II studies are in progress and the study reports will be issued in December 2013.

While the ISO is open to considering further downsizing options through this initiative, it is important to recognize that the ISO is now only partway through implementation of the current one-time downsizing opportunity and therefore the ISO and stakeholders do not yet have the benefit of lessons learned from this one-time downsizing opportunity. Considering significant changes to that approach or departures from it would thus be premature. In this same vein, it is important to point out that the many features of the one-time downsizing opportunity were developed in consultation with stakeholders and were approved by FERC. Any future downsizing options should be based on these same features as far as possible.

One feature in particular the ISO believes is very important and merits emphasizing here is that downsizing requests should be submitted during a request window of limited time duration. Funneling downsizing requests through such a window permits ISO and PTO transmission planning engineers to evaluate the collective impacts of all downsizing requests in the most efficient manner possible. This is in contrast to the inefficiency and associated chaos of having to review the impacts of downsizing requests sequentially, at any time that an interconnection customer chooses to submit such a request. Similarly, expansion of the ability to downsize through a “material modification” review would essentially allow downsizing requests to be submitted at any time and would thus present the same problems. The ISO does not support anytime submission of downsizing requests or expanded use of “material modification” review as future downsizing options.[14]

The ISO believes this feature from the one-time downsizing approach – a downsizing request window of limited time duration – should be utilized in any future downsizing option. Moreover, to leverage existing study cycles and minimize disruption to existing processes, the ISO believes that the timing of when a downsizing request window occurs is also important and should coincide with existing cycles. The ISO suggests that the timing of a downsizing request window should be such that there is sufficient time to validate the requests received and study their combined impacts at the same time the re-assessment study is conducted in accordance with the GIDAP timeline.

With regard to the frequency of such downsizing request windows, the ISO has committed to consider a second downsizing opportunity for pre-Cluster 5 projects through this initiative. Whether there is a need for further downsizing opportunities beyond a potential second downsizing opportunity is not yet known. That said, to the extent there were a need for additional downsizing opportunities, the ISO suggests that no more than one per year should be considered and posits whether a less frequent downsizing request window might be sufficient – e.g., once every two years . The ISO invites stakeholders to comment on the optimal frequency of downsizing

[14] Some stakeholders have suggested expansion of the ability to downsize through material modification review with new provisions to allow the downsizing generator to mitigate any material impacts. This is unworkable as the material modification review process does not involve restudies to assess what the magnitude of these material impacts might be, and the addition of any new restudies on an as-requested basis is simply not feasible.

requests windows. The ISO also invites stakeholders to comment on the number of downsizing request windows that should be considered—e.g., is a second downsizing request window sufficient or should such windows continue until there is no further demand for them.

As with the one-time downsizing opportunity currently in progress, future downsizing options should be limited to pre-Cluster 5 customers. For projects entering the ISO queue in 2012 or later (i.e., starting with Cluster 5), interconnection to the ISO grid is governed by the new Generator Interconnection and Deliverability Allocation Procedures ("GIDAP") approved by FERC in 2012. The ISO is now only partway through the first implementation cycle of the GIDAP and is not yet ready to consider changes to the GIDAP.

Other important features of the current one-time downsizing opportunity should also be incorporated into any future downsizing options. For example, customers who are affected by but are not downsizing should be protected, and downsizing projects should bear the costs of the downsizing study and any resulting interconnection agreement amendments.

With regard to continued use of the non-conforming partial termination provision as a future downsizing option, the ISO has already stated that it does not categorically rule out future use of a similar contractual partial termination mechanism. Indeed, the non-conforming partial termination provision continues to be incorporated into interconnection agreements today for projects that meet the criteria listed above. However, the ISO does not view this as a generally applicable downsizing option. Moreover, the ISO believes that it is only appropriate on a case-by-case basis and in very limited circumstances. It also does not utilize the important feature of a downsizing request window of limited duration.

Stakeholders are invited to comment on the ISO's suggested approach that any future downsizing options should be based on the features of the one-time downsizing opportunity approved by FERC in 2012.

## 5.2 Disconnection of first phase of project for failure of second phase

### 5.2.1 *Scope of topic*

This topic was suggested by Large-scale Solar Association (LSA), CalWEA, and Tenaska in the March 2012 stakeholder survey, and was recently proposed again by LSA.[15]

The stakeholders raising this issue assert the possibility that the ISO could fully terminate a GIA, in the situation where one phase of a project is already operating but a later phase of the project is cancelled, causes severe project financing problems. LSA asked that the ISO clearly delineate conditions under which the ISO would seek to terminate a GIA for the operating portion of a

[15] This issue was also raised in the complaint filed at FERC by CSOLAR earlier this year in FERC Docket No. EL13-37-000. FERC denied the complaint.

generation project if all the capacity is not built. Other stakeholders have argued that the ISO should make a definitive statement that it would not terminate the GIA of a project that fails to complete all project phases.

The issue relates to the rights of the contracting parties (interconnection customer, participating transmission owner, and the ISO) under the pro forma interconnection agreement, which is an appendix of the ISO tariff and provides for a contracting party to declare another contracting party who fails to perform or observe any material term or condition of the GIA to be in breach of the agreement and to default on the contract. The pro forma interconnection agreement further provides that termination of the contract is a potential remedy for default, and further provides for disconnection of the generating facility if the GIA is terminated. The question of whether and how a contracting party actually exercises these rights under the GIA is entirely fact specific to the transaction and can only be determined on a case-by-case basis. To enable more informed discussion of this topic, section 5.2.3 below outlines the steps of the process that would have to be followed before a GIA breach could result in termination of the GIA and disconnection of the operational portion of the generating facility.

This topic will consider both the risks these provisions pose for the interconnection customer and the entity that finances a generation project, as well as the ISO's concerns about a blanket elimination of these provisions, and will explore possible approaches that address the concerns of both sides. The ISO requests that stakeholders, in their written comments, offer any additional explanation of the risks involved or any related concerns, and possible approaches for mitigating such risks short of a blanket elimination of the ISO's GIA termination rights.

A related issue is the provision for "substantial performance" by an interconnection customer of its obligations under the GIA. In the GIP 2 initiative in 2011, the ISO clarified that a customer will have a "safe harbor" of five percent (5%) of its project's MW capacity as specified in the GIA. This means that the completed MW capacity of the project could be as much as 5 percent less than the MW specified in the GIA, for any reason, and the customer would be considered to have complied with "substantial performance" of its contractual obligations and thus would not trigger default of the GIA. In addition, if the completed project capacity is more than 5 percent below the MW specified in the GIA and the size reduction is the result of environmental or permitting limitations, the ISO will consider the merits of the reduction on a case-by-case basis.

Recent experience with projects in the interconnection process has suggested that the 5% safe harbor could be revised to allow size reductions up to "the greater of 5% of the project capacity or 10 MW" for any reason, and that this would be helpful to project developers without having adverse unintended consequences. As part of the scope of this topic, the ISO will consider this modification. The ISO requests stakeholder views on this matter in their written comments.

### 5.2.2 *Related topics*

In the previous round of written comments several stakeholders pointed out that this topic is closely related to two other topics in the scope of this IPE initiative: topic #1 (future downsizing policy), and topic #3 (clarify tariff and GIA provisions related to dividing up GIAs into multiple phases or generating projects). Some stakeholders suggested that all three topics be combined into a single topic.

The ISO has decided to keep the three topics separate for purposes of developing proposals, in view of the fact that each topic contains multiple sub-issues that must be addressed individually anyway. This approach will not prevent us from properly considering the inter-relations among the topics and sub-issues. For example, the ISO recognizes that topics #1 and #3 represent possible ways for an interconnection customer to reduce the likelihood of its project falling outside the safe harbor for substantial performance, by formally downsizing the project, adopting a phased structure with partial termination provisions, or subdividing it into multiple projects. Nevertheless, even if the customer adopts one of these other approaches, there is still the residual scenario in which the MW size of the completed, operational project is more than 5% below the size specified in the GIA, outside the safe harbor with no environmental or permitting justification to point to. Thus, the narrow questions raised in this topic must be addressed in their own right, irrespective of any other new provisions developed under topics #1 and #3.

### 5.2.3 *The process required to disconnect an operating project for GIA breach*

In summary, before a large or small generating facility can be disconnected from the ISO controlled grid due to the interconnection customer's default on a GIA, the customer must be notified of and fail to cure a breach of the agreement, and FERC must accept a notice of termination filed by the ISO and/or PTO. The specific steps are described in more detail as follows.

- A breach of the interconnection agreement occurs if a party fails to perform or observe any *material* term or condition of the interconnection agreement.[16]
- A default occurs if a party fails to cure a breach of the interconnection agreement.[17]
- The ISO and/or PTO is required to provide a written notice of breach to the interconnection customer, providing an opportunity to timely cure the breach within a specified number of days:
    - Five (5) business days to timely cure a failure to post interconnection financial security required by the interconnection agreement.[18]

[16] Article 1 of ISO tariff Appendices V, Z, BB, CC, and EE (definition of breach).

[17] Attachment 1 of ISO tariff Appendices T and FF (definition of default); Article 1 of ISO tariff Appendices V, Z, BB, CC, and EE (definition of default).

  - For a large generating facility only: Thirty (30) calendar days to timely cure any other breach of the interconnection agreement; provided, however, that if the cure cannot be completed within 30 calendar days, the defaulting party must commence the cure within 30 calendar days after notice and continuously and diligently complete such cure within ninety (90) calendar days from receipt of the notice.[19]
  - For a small generating facility only: Sixty (60) calendar days to timely cure any other breach of the interconnection agreement; provided, however, that if the cure cannot be completed within 60 calendar days, the defaulting party must commence the cure within twenty (20) calendar days after notice and continuously and diligently complete such cure within six (6) months from receipt of the notice.[20]
  - If a breach is not timely cured, or if a breach is not capable of being timely cured within the applicable period described above, the non-breaching parties may declare a default and terminate the interconnection agreement by written notice at any time until cure occurs.[21] The tariff does not, however, require the ISO or PTO to seek termination of the GIA upon declaring a default. The tariff states that the non-breaching party can "recover from the breaching party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or equity" regardless of whether or not the non-breaching party terminates the GIA. Thus, it is possible at this point for the contracting parties to try to identify and seek FERC approval of an alternative, equitable, non-termination remedy that is appropriate to the situation.
- A party that disputes a written notice of default can initiate dispute resolution procedures pursuant to the interconnection agreement.[22] Termination of the GIA would not occur while the dispute resolution procedures are in progress.
- Absent the parties identifying a mutually acceptable non-termination alternative, the ISO and/or PTO will file any notice of termination of the agreement with FERC. The termination can become effective only after FERC determines that termination of the GIA – and the consequences, in this case disconnection of the operational phase of the generating facility – are just and reasonable, and accepts the notice.[23]

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[18] Article 6.4.2 of ISO tariff Appendices T and FF; Article 11.5.1 of ISO tariff Appendices Z, BB, CC, and EE.

[19] Article 17.1.1 of ISO tariff Appendices V, Z, BB, CC, and EE.

[20] Article 7.6.1 of ISO tariff Appendices T and FF.

[21] Article 7.6.2 of ISO tariff Appendices T and FF; Article 17.1.2 of ISO tariff Appendices V, Z, BB, CC, and EE.

[22] Article 10 of ISO tariff Appendices T and FF; Article 27 of ISO tariff Appendices V, Z, BB, CC, and EE.

[23] Article 3 of ISO tariff Appendices T and FF; Article 2.3.4 of ISO tariff Appendices V, Z, BB, CC, and EE.

- Upon approval by FERC to terminate the agreement, the parties will "take all appropriate steps" to disconnect the generating facility from the ISO controlled grid.[24]

## 5.3 Clarify tariff and GIA provisions related to dividing up GIAs into multiple phases or generating projects

### 5.3.1 *Description and scope*

The general situation this topic will address is where an interconnection customer has submitted an interconnection request for a specific project, and then at a later time – generally in the process of negotiating the interconnection agreement – the interconnection customer wishes to divide up the project into a number of phases, each phase potentially having a different COD, such that the MW capacities of the phases add up to the MW of the original project, and the COD of the last phase to be completed is the same as the COD of the original project. Within this general situation, customers have requested several different scenarios:

- The interconnection customer will retain ownership of all phases and include them in a single GIA;
- The interconnection customer wishes to assign ownership of each phase to a different owner, with all phases under a single GIA; and
- The interconnection customer wishes to assign ownership of each phase to a different owner, with a separate GIA for each phase.

Stakeholders may wish to identify additional scenarios for discussion within this topic. Each of the scenarios will have some specific sub-issues that need to be addressed, as discussed below.

This topic is supported by many project developers who believe that they need greater flexibility to split projects into smaller pieces (or "phases") in order to better meet load serving entity power purchase agreement procurement opportunities and/or make financing more manageable as long as the parties involved (e.g., the different limited liability companies or LLCs) are "related" to the entity that submitted the interconnection request. The ISO permits interconnection customers to divide a project into phases, which are reflected in the interconnection agreement. The ISO asked stakeholders in the April 8, 2013 scoping proposal to provide additional information so that the ISO could assess what additional capability is desired, and some stakeholders did provide this information in their written comments.

The ISO envisions that the scope of this topic would include interconnection customers up through Cluster 4. The ISO is open to discussing whether the topic should also include interconnection

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[24] Article 3.3.3 of ISO tariff Appendices T and FF; Article 2.5 of ISO tariff Appendices V, Z, BB, CC, and EE.

customers that apply under the GIDAP, but is concerned that consideration of GIDAP may make the entire topic more complicated and require more time to resolve. The GIDAP already provides certain opportunities to downsize projects that were not available under the GIP, and thus it may be difficult to assess whether there may be complications or unintended consequences from allowing expanded project phasing opportunities under the GIDAP. Moreover, because the ISO has not yet implemented a full cycle of the GIDAP, it is premature to assess how well the existing provisions meet the needs of interconnection customers.

This topic is not intended to cover phased implementation during construction to avoid damage to equipment or to ease testing ability for the project. The ISO already allows project to test prior to completion of all reliability network upgrades, provided a Limited Operation Study determines that testing energy can be supported by the then current configuration of the grid. The ISO also already allows projects to achieve actual COD prior to the COD specified in the GIA if all reliability network upgrades and interconnection facilities are completed. Depending how far in advance, the interconnection agreement may need to be amended to effectuate this action, or parties may desire to amend the contract.

### 5.3.2 *Background*

Provided below is a list of what the ISO allows under its business practice, based on current tariff provisions.

1. Only one interconnection request is allowed per proposed generation project.
2. Each interconnection request is reflected in one interconnection agreement. If the interconnection request relates to an expansion of an existing project, then the existing interconnection agreement can be amended to incorporate the expansion interconnection request. If the same entity (i.e., LLC) has two or more projects at the same point of interconnection, and the entity desires to aggregate the projects under one interconnection agreement the ISO will allow that configuration.
3. An interconnection customer is allowed to divide its project into phases, such that each phase may be planned to reach commercial operation at a different date, subject to the reliability upgrades and interconnection facilities required for each phase being in service, as long as the last phase achieves commercial operation by the COD specified in the interconnection request for the project.
4. To date, the ISO has allowed, based on previous requests from customers, an interconnection customer to divide a project into a maximum of four phases. The ISO requests that stakeholders interested in phasing comment on whether more than four phases should be allowed and describe why this is needed.
5. Where an interconnection customer has divided its project into phases under a single GIA, the ISO has allowed the phases to have different owners, so long as all of the owners are

affiliates of the interconnection customer, but only under the condition that all of the co-owners (typically set up as distinct LLCs) must agree to assume joint and several liability for all of the obligations relating to the interconnection. This means that all of the owners are both individually and collectively responsible for all of the interconnection obligations.

#### 5.3.3 *Issues*

Issues that would need to be addressed for this topic include:

- The need for a minimum total MW size threshold for a project to be eligible for dividing into phases. For example, would it make sense to allow a 5 MW project to be split into smaller phases?
- A maximum number of phases into which a project can be divided.
- A minimum MW size of each phase.
- Criteria that include both a minimum total MW threshold and a minimum phase size in MW or a percentage of the total project. For example, in its written comments PG&E suggests that "Projects > 20 MW may have additional phases, provided no additional phase is smaller than the larger of 20 MW or 10% of the nameplate capacity."
- When during the interconnection process an IC may request to implement a phased structure for its project.

Phasing of a GIA is different than the construction implementation and testing requirements for a solar PV or wind project. The ISO and PTOs are working with projects during testing to determine if a "little-p" phased implementation is needed to avoid damage to equipment (i.e., bring groups of collectors on line).

Interconnection customers have asked in the past to be able to divide their projects into phases as described above, but have requested arrangements where all of the co-owners do not have to agree to joint and several liability with respect to the interconnection obligations for the entire project. The ISO believes that if an interconnection customer desires to divide its project into phases as described above it is essential that the co-owners agree to joint and several liability for the obligations relating to the whole project. The ISO does not envision being persuaded in this stakeholder process to modify this practice. The ISO believes that this is a reasonable outcome that strikes the appropriate balances between allowing customers flexibility in developing their projects while at the same time ensuring that the ISO and participating transmission owner can effectively administer interconnection arrangements. In particular, the ISO does not believe that it should be in the position of having to navigate the contractual relationship between individual owners of phases with respect to projects that have been processed and studied as single interconnection requests and share interconnection facilities in order to administer and enforce the obligations set forth in its tariff and agreements.

The ISO is interested in hearing stakeholders' thoughts on the thresholds that should be used in allowing projects to be broken into multiple phases, as well as any conditions or criteria that should be imposed where phasing is desired. The ISO would like to hear stakeholders' suggestions and comments before it puts forth a specific proposal. The ISO envisions that it will submit a proposal regarding this subject in the straw proposal paper in mid-July 2013.

### 5.3.4 *Stakeholder comments*

**AES Solar (AESS)**. Topic #3 would allow developers to split projects into multiple phases and/or GIAs, which presumably would give them the ability to "downsize" through withdrawal of one or more of any resulting separate projects from the interconnection queue. Because of the high degree of overlap, AESS believes that it might be more efficient for the ISO to combine these three items and address them as a single comprehensive topic. AESS believes that developers need more flexibility to adjust their project structure and size after Interconnection Requests (IRs) are submitted, and in some cases after IA's are executed as long as the impacts on other projects are mitigated.

**Clean Coalition**. It is not clear whether parties still seek attention to this issue. The Clean Coalition does support coordination of LSE PPA procurement opportunities (item 13) as a priority, and there is some overlap of phasing issues with staff proposed scoping of issues related to downsizing policy and failure to proceed on planned later project phases (topics 1 and 2).

**Independent Energy Producers (IEP)**. Topics 1, 2 and 3 are each distinct yet have a common basis in the development reality that project sizes and timing of project phases can remain uncertain sufficiently far into the study process as to create risk for the IC as well as the ISO with respect to study assumptions that may impact other interconnecting customers. The ISO has indicated a shift in practice for this initiative wherein they will assign specific issues to individual staff. The fact that topics 1, 2 and 3 represent two high-effort topics and one medium-effort topic indicates that a 'divide and conquer' approach may be the best means to prevent overburdening manpower and a topic too dense to move with any reasonable pace. Even so, the interrelationship between these three topics calls out for purposeful coordination between them – and their assigned ISO staff. IEP suggests that the ISO define a working group methodology that insures each topic's learnings and progress are regularly communicated to the assigned staff of the other two topics as well as stakeholders. The 'closeness' shared by these three topics suggests a higher than average probability of unintended consequences if they are worked in isolation. IEP believes that timely communication between these three topics will further enhance the outcomes of each individual topic.

**Large-scale Solar Association (LSA).** LSA believes that there are several issues regarding phased projects that still require clarification that should be included in the scope of this item. For example, non-phased projects are eligible to begin receiving transmission refunds when they reach

COD and the project is completed. Phased projects wishing to receive refunds for each phase can begin doing so when a phase reached COD and is completed, and the upgrades are complete. However, phased projects that are completed (all phases) should be treated the same as completed non-phased projects, i.e., be eligible to begin receiving transmission-cost refunds. It would also be helpful to clarify in the tariff that a developer can phase a generation project at any time. The project interconnection studies even for projects that are phased in the Interconnection Request assume that COD for all phases is at the same time, so later phasing of a non-phased project should not impact the study results. LSA suggests creating a combined topic called "Options for Structuring Projects." LSA explains that this combined topic would explore ways to provide more flexibility to developers in sizing and structuring their projects without unreasonably adding to workload or financial risks for PTOs. Such opportunities could be provided through:

- Explicit project downsizing opportunities, e.g., specific studies/windows or incorporating annual opportunities in the cluster-study pre-validation process *(current Issue #1)*;
- Allowing a project to retain a GIA if all project phases are not built *(current Issue #2)*;
- Providing developers flexibility to split projects into multiple phases and/or GIAs *(current Issue #3)*, with the ability to withdraw one or more phases or projects from the interconnection queue;
- Allowing certain project revisions (e.g., inverter/transformer manufacturer changes) without the need for a Material Modification Assessment *(see comments above on Issue #6)*.

LSA's concern generally, consistent with its past comments, is that developers need more flexibility to adjust their project structure and size after Interconnection Requests are submitted. Because transmission construction has a longer lead time than nearly any other generation-project activity (e.g., longer than PPA acquisition, permitting, or financing), the ability to restructure and/or downsize generation projects later is critical to project success. The tariff should provide that developer can phase or split a generation project at any time. The project interconnection studies even for projects that are phased in the Interconnection Request assume that COD for all phases is at the same time, so later phasing of a non-phased project should not impact the study results. Similarly, splitting a generation project into different GIAs would not impact any interconnection studies, and this process can be used to develop standard guidelines to ensure that all pre-split financial and other obligations are covered after the split. These options can simplify the PPA and financing process and reduce the number of unnecessary MMAs that must be processed.

**Southern California Edison (SCE).** SCE believes that this topic should be in scope; however, in order to be effective and avoid operational challenges, the ISO needs to develop with stakeholder input a small amount of structure to the phasing effort, such as some eligibility criteria. In this manner, the two items already in scope (partial termination and additional downsizing) along with expanded phasing opportunities can provide the generation developers the flexibility they desire to meet LSE procurement activities, while maintaining the system operational integrity and reliability. This topic should be properly structured to establish basic criteria for eligibility and provide the details surrounding implementation (e.g. via an implementation plan that can be revised as needed without amending the interconnection agreement). Adding a small amount of structure to this effort, while providing an opportunity for stakeholder input in the development of these criteria, should assist the ISO in providing additional phasing opportunities while avoiding operational problems that might occur from unmanaged phasing. This effort, when combined with discussions regarding partial termination and additional downsizing should provide the generation developers with the flexibility they have desired to better align CODs with the timelines in the LSE's procurement processes, while preserving system operational integrity and reliability.

**NRG Energy (NRG).** NRG ranked this topic in its top 5 topics as selected by the stakeholder. NRG therefore believes that this topic is a high priority topic.

**Pacific Gas and Electric Company (PG&E).** PG&E recognizes the benefits that additional phasing flexibility can create for generators and procurement programs, but also recognizes the serious logistical issues in contract management and transmission build out that excessive flexibility creates. PG&E is open to a reasonable degree of additional phasing flexibility and suggests the following criteria:

- Projects ≤20 MW may have up to two phases, with no individual phase smaller than 5 MW; and,
- Projects > 20 MW may have additional phases, provided no additional phase is smaller than the larger of 20 MW or 10% of the nameplate capacity.

## 5.4 Improve Independent Study Process

In response to stakeholder requests for an improved Independent Study Process (ISP), this topic was included in the March 1, 2012 ISO GIP 3 Issue Paper. As a consequence of the GIP 3 initiative being deferred, the ISP still needs improvement. Under this topic the ISO intends to work with stakeholders to revise the ISP to more closely align with its original intent and to further clarify the ISP.

### 5.4.1 *Issues*

There are two primary issues associated with the current ISP and a third issue has been added to this initiative based on stakeholder input.

First, as the ISO and the PTOs have implemented the ISP, it has become apparent that the tests for independence do not align with the overall ISP intent. The ISP was intended to study qualifying projects in an expedited study process where only reliability network upgrades are determined. ISP projects requesting Full Capacity Deliverability Status (FCDS) are required to be studied for deliverability network upgrades separately in the standard cluster study process with other projects in the next scheduled cluster study. In other words, a project requesting FCDS would go through a two-step process, first being studied as energy-only and separately being studied for FCDS in the standard cluster timeline. This would allow a project to more quickly come online as energy-only and to be able to achieve FCDS through the standard cluster study process. The current tariff language states that tests for independence are based on "network upgrades," and does not delineate between reliability and deliverability network upgrades. This results in projects being tested for independence on a basis of both reliability and deliverability network upgrades. This is a much higher hurdle than being tested for independence based on reliability network upgrades alone.

Second, this process is viewed as overly complicated and needs to be simplified and made more straight forward.

Third, the behind the meter expansion component of the ISP has shown to be an option of increasing interest and this area of the ISP should be reviewed for improvements based on experience the ISO has gained in processing behind the meter expansion requests.

### 5.4.2 *ISP working group*

The ISO proposes a working group be formed to take on the task of more clearly defining the ISP as a process where projects that meet the eligibility criteria and pass the tests for independence – based on reliability network upgrades – are able to come online as energy-only more quickly than the standard cluster process. The issues associated with the tests for independence are technical in nature. Since the PTOs perform the studies for reliability network upgrades on behalf of the ISO, they perform the independence test for projects seeking to enter the ISP. The ISO proposes that the working group consist of a team of engineers from the PTOs and the ISO along with other stakeholders that are willing to participate on the working group. The working group will present its recommended revisions to the entire IPE initiative stakeholder group.

## 5.5 Improve Fast Track

In response to stakeholder requests for an improved Fast Track Study Process (FT), this topic was included in the March 1, 2012 ISO GIP 3 Issue Paper. As a consequence of the GIP 3initiative getting deferred, the FT still needs improvement. The intent of this topic is to develop improved screening criteria for the FT.

### 5.5.1 *Issues*

The screening criteria for the FT are adaptations of criteria used for screening distribution interconnections and have been found to not be workable for screening projects seeking to interconnect to the ISO's higher voltage transmission system. This has resulted in delays in the screening process and few projects have been able to pass the process screens and qualify for FT treatment. This effort will seek to develop more appropriate screening criteria to qualify for FT treatment and more quickly interconnect to the ISO grid. The current 5 MW FT project size limitation will not be open for revision.

### 5.5.2 *FT working group*

The ISO proposes to develop a working group that will seek to develop FT screens that are appropriate for projects interconnecting to the ISO's network transmission system. By its very nature and intent the FT process only allows projects to interconnect on an energy-only basis. The issues associated with the FT screens are technical in nature. Since the PTOs perform the studies for reliability network upgrades on behalf of the ISO they perform the screening process for FT projects. The ISO proposes that the working group consist of a team of engineers from the PTOs and the ISO along with other stakeholders that are willing to participate on the working group. The working group will develop a set of proposed screens and present those to the entire IPE initiative stakeholder group.

## 5.6 Provide for ability to charge customer for costs to process a material modification request

The ISO and PTOs are allowed cost recovery from the interconnection customer for the application and study process, and limited operation study process; and from generation owners for the repowering request process. With the expansion of queue management in 2012, the ISO and PTOs analyzed 96 modification requests and to date in 2013, we have already replied to an additional 22 modification requests. Upon receiving a request, the ISO's queue management unit evaluates the request for completeness and then forwards the request to both the ISO planning engineers and the PTO planning engineers. Using judgment, the engineers will determine if another project in the queue is impacted by the request. Their findings are then sent back to the ISO's queue management unit for development of a response. The response is reviewed and approved by the ISO and PTO prior to being sent to the interconnection customer. Review and analysis of these requests have taken a significant amount of time and resulted in the hiring of new staff for both the ISO and PTO(s). These costs should be reimbursed by the interconnection customer requesting the modification for their project. Direct reimbursement would allow the ISO and PTO(s) to dedicate additional resources to this task and thereby aid in expediting the process and should also act to discourage non-serious material modification requests that have already happened in a few instances.

Currently the ISO's interconnection procedures are not entirely clear insofar as they state that during the interconnection study process, except for a few specified types of project modifications, a customer "may" request that the ISO evaluate whether another type of modification is a material modification. .[25] Although the ISO believes that it is evident from the surrounding language and context that obtaining a material modification review from the ISO is required for all modifications except those specifically exempted, the ISO is proposing to clarify this requirement. Given the volume of modifications and potential impact to other queued projects, the ISO believes that an interconnection customer should be required to formally request material modification review for all proposed modifications to their project. Absent such review the modification could result in an impact to other queued customers.

### 5.6.1 *Issues*

Another issue similar to this topic is topic #48 from the April 8 scoping proposal (recovery of contract development costs). SCE again raised this issue in their comments citing that SCE and other PTOs are committing significant time and resources to develop and negotiate GIAs. The recovery of costs incurred by SCE with respect to the development of these GIAs should be aligned with the cost-causer (i.e. interconnection customer) rather than being ultimately paid for by ratepayers. In addition to the instances cited in the scoping proposal, where the ISO and PTO are allowed cost recovery from the interconnection customer for the application and study process, repowering request process and limited operation study process, another potentially guiding precedent is where downsizing applicants were required to post $100,000 to cover the costs related to the renegotiation of GIAs as a result of the outcomes from the technical reevaluations. As the drivers are the same, and the ratepayer impacts material, SCE sees very good reason to combine these two efforts together into a single topic. PG&E agrees with SCE's position that GIA development and negotiation costs should be recovered from the interconnection customer.

The ISO did not add this topic to the IPE Scope based on discussion during the GIP 3 initiative whereby an argument was made that all three parties (ISO, PTO and interconnection customer) incur costs for negotiating the GIA. Because each party has an obligation to negotiate in good faith, a perverse incentive could arise if one or more parties were financially compensated for the negotiation.

### 5.6.2 *Stakeholder comments*

Comments received by the stakeholders in response to the April 8 scoping proposal included the following:

**Clean Coalition** - While we support addressing this issue as a matter of fairness, it has not been shown to be an urgently pressing issue of significant impact to an efficient and effective GIP, and addressing other issues first will have greater impact.

**Southern California Edison (SCE)** - supports cost recovery for the modification process.

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[25] See Appendix U Section 4.4.3, Appendix Y Section 6.9.2.2, and Appendix DD Section 6.7.2.2.

**Pacific Gas & Electric (PG&E)** - supports inclusion of this topic in IPE. Material modification requests and contract development negotiations require significant administrative and technical resources to process. In order to protect ratepayers, interconnection customers should be responsible for costs associated with the ISO's and PTOs' work on material modifications and contract development negotiation. PG&E also believes this issue should be addressed because (a) the material modification request process is currently not well defined by ISO, frequently leading to confusion over what needs a material modification request and what is appropriate context for the material modification request, and (b) material modification requests are often used as a stall/delay tactic for interconnection customers, draining PTO staff time and resources that could be better deployed elsewhere. The ISO believes that significant work has been accomplished in the last year with respect to the modification process and the ISO is proposing under topic #15 to provide additional transparency on the modification process and requirements. PG&E further commented that it would be good to tie cost recovery to causation to reduce non-serious modification requests, and to provide PTO(s) cost recovery that will allow for better service and processing of such requests.

**Large-scale Solar Association (LSA)** - Transparency about study charges generally. LSA has long maintained that transparency should be increased for ISO/PTO interconnection study costs. With the exception of the generator project downsizing study (where developers pushed strongly for cost estimates), the ISO never provides study-cost estimates in advance. Moreover, it is very difficult to get timely study-cost information even after the fact (e.g., at a Results Meeting), and the ISO never releases even average or ranges of costs for different types of studies, or any information on hourly or other study charges. LSA believes that charges for ISO/PTO interconnection studies should be at least as detailed as similar studies by third-party consultants, for example including the hourly charges for different kinds of work and total hours expended. There should also be a timeline in the tariff for study-cost statements and release of unused Study Deposit money.

- Assurances about study-cost reasonableness. LSA does not object to reasonable charges for assessing material modification requests, but those charges should only be imposed after changes that would assure a developer that the study would make sense given the nature of the changes, i.e.;
    - Advance cost estimates or, preferably, a standard material modification request study cost amount; and,
    - Cost cap, e.g., 10% over the cost estimate.

LSA went further proposing ways to minimize the need for material modification requests, for example determining project changes that could be made without a material modification request. Such changes could include project phasing or splitting, as long as the point of interconnection stays the same, and inverter or transformer changes that do not change the electrical properties of the equipment or original study parameters. With respect to LSA comments mingling addition studies with modification requests, the ISO Tariff allows re-study for serial projects, however cluster project cannot be re-studied as an individual project and only modification decisions that do not require a study can be assessed. The ISO also agrees with LSA that we need to do a better job defining the material modification process for stakeholders and detailing the opportunities for little or no modification assessment provided the other parties to the agreement are aware of the changes. This issue will be covered under topic #15.

### 5.6.3 *ISO straw proposal*

The proposal for this topic is to expand the existing cost recovery mechanisms for re-study of serial projects in the ISO tariff for cost recovery of modification requests. In addition we are proposing that the tariff be amended to allow use of study funds that have already been deposited, if applicable, and clarify that, except for modifications explicitly permitted during the study process, all modifications will require a material modification review.

The ISO invites stakeholders to comment on the following:

- Cost of modification review.
  - Should the cost for modification requests be a fixed fee or deposit and actual costs incurred be charged against the deposit?
- Timing of deposit and timing of deposit return:
  - Should existing study funds be used for modification assessments?
  - If a separate deposit is made, should it be refunded at the end of that modification assessment or once the project achieves COD?[26]

## 5.7 Commercial operation date modification provision for small generator projects

Article 4.4.3 and 4.4.5 of Appendix U for serial, Article 3.5.1.4 and 6.9.2.2 of Appendix Y for cluster projects, and Article 6.7.2 of Appendix DD for GIDAP allow large generators to change their commercial operation date ("COD") through the modification process. There is no corresponding provision in the SGIA (there is only a milestone change provision in the SGIA). The milestone change provision requires all three parties to agree and provides that all three parties would re-execute Attachment 4 to the SGIA. The ISO believes that the SGIP should be amended to allow a modification process for small generators generally similar to the modification process for LGIAs.

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[26] The ISO has seen where a project has multiple modification requests over time. To avoid additional administrative costs, a single deposit could be made and then that account would be assessed the cost of modification assessments when they occur. Similar to all funds held by the ISO, interest is earned on such funds consistent with the ISO Tariff.

The thought is that just because a project is 20 MW or less, a change to COD, point of interconnection or technology such as inverters should be allowed if there is no impact to other queue projects, and to allow consistent application for the ISO and PTOs the process should be similar to the large generation modification process already in place. The original thinking when the SGIA was put in place was that a small generator project would be studied, contracted and online in a minimum period of time. However, that thinking has not come to fruition and with both the length of time in queue and changing technology a stated mechanism to allow change would be more consistent with existing practice and allow clarity for SGIAs.

### 5.7.1 *Stakeholder comments*

The only comments received by the stakeholders in response to the April 8 scoping proposal for this topic was from PG&E. PG&E stated that they agree with the ISO that these would require only minor fixes to conform small generator provisions to existing large generator provisions, and support inclusion in the scope.

### 5.7.2 *ISO straw proposal*

The straw proposal for this topic is to revise Appendix S, SGIP, Appendix T SGIA, and the GIDAP SGIA to reflect the discussion above.[27]

The ISO invites stakeholders to comment on the following:

- Do Stakeholders agree that small generators should be afforded a similar mechanism to modify their project as a large generator?
- Should small generators be allowed to change their POI if the change does not impact other queued projects and there is a benefit for making that change? (Benefit could be a reduction in costs; easier to site; etc.)
- Should small generators be allowed to modify their project during the study process?
- Should small generators be allowed to extend their commercial operation date for three (3) years from the COD in their interconnection request and that request would be deemed not material, similar to Section 4.4.5 of Appendix U for large generators?

## 5.8 Length of time in queue provision for small generator projects

This provision is needed in conjunction with the previous topic, COD modification for small generator projects. Article 3.5.1 of Appendix U for serial LGIP projects, Article 3.5.1.4 of Appendix Y for cluster LGIP projects, and Article 3.5.1.4 of Appendix DD for GIDAP establishes a specific length

[27] Note: Similar to the discussion in topic #6, modification assessments for SGIP projects would also provide for cost recovery.

of time from the interconnection request whereby an LGIP facility must be either in-service or in commercial operation. Absent a comparable time limit for SGIP projects, if the ISO and PTO agree to consider a request for COD extension, they will have no authority or ability to limit the length of time SGIP projects can remain in queue without advancing to commercial operation. In addition, without a specific timeline an extension of COD could allow the SGIP project to languish in the queue forever. If stakeholders agree with topic #7, then a specific extension timeline must also be agreed to.

### 5.8.1 *Stakeholder comments*

The only comments received by the stakeholders in response to the April 8 scoping proposal for this topic was from PG&E. PG&E stated that they agree with the ISO that these would require only minor fixes to conform small generator provisions to existing large generator provisions, and support inclusion in the scope.

### 5.8.2 *ISO straw proposal*

The straw proposal for this topic is to add a new section to Appendix S, SGIP consistent with the discussion above.

A change is not required to Appendix DD, GIDAP because Section 3.5.1.4 covers both large generators and small generators with respect to the time allowed in the ISO queue.

The ISO invites stakeholders to comment on the following:

- Should a small generator have the same time to develop their project as a large generator (i.e. 7 years)? If no, what should the length of time be for the developer of a small generator?

## 5.9 Clarify that the Participating Transmission Owner and not the ISO tenders the generator interconnection agreement

The draft of the GIA is tendered by the PTO and not the ISO. The PTO tenders the GIA because the PTO is the only party that has the detailed cost and construction schedule information for interconnection facilities and network upgrades. The tariff currently states that the ISO <u>and</u> PTO tender the GIA (*emphasis added*). This tariff provision should be changed to reflect that the PTO tenders the GIA and not the ISO.

### 5.9.1 *Stakeholder comments*

**Clean Coalition** - This issue would seem to be so easily addressed that it should not displace a topic of more substance or consequence. As noted above, we support including more topics that require a low amount of effort to the degree that ISO staff can do so while still addressing priority topics.

**Pacific Gas & Electric (PG&E)** - We agree with the ISO that these would require only minor fixes to conform small generator provisions to existing large generator provisions, and support inclusion in the scope.

### 5.9.2 *ISO straw proposal*

The straw proposal for this topic is to amend Appendix U, LGIP; Appendix Y, GIP; and Appendix DD, GIDAP GIP to reflect that the Participating TO, not the ISO, will tender draft LGIAs.

The ISO invites stakeholders to comment on the following:

- Do stakeholders have a concern with amending the tariff to be consistent with existing implementation?
- If yes, what are those concerns and how would the stakeholder propose to resolve those concerns?

## 5.10 Timeline for tendering draft generator interconnection agreements

The trigger of the timeline for tendering draft interconnection agreements was originally a topic included in the March 1, 2012 GIP3 issue paper. In response to stakeholder requests for improved queue management, the ISO is proposing this topic again here. The ISO is proposing to modify the starting date for the GIA tendering and negotiation process. The intent of this change is to increase efficiency of contract negotiations. Specifically, the ISO is proposing to modify the trigger to tender the draft GIA from 30 Calendar Days ("CD") after the ISO provides the study report to 30 CD from the customer Results Meeting as that term is defined in the GIP procedures. This would allow the ISO and applicable PTO(s) an opportunity to incorporate customer changes requested at the results meeting into the tendered GIA. In a number of instances, there has been work that needs to be re-done because the existing timeline of 30 CD from the date the study reports are provided to the interconnection customer could require the ISO and PTO to tender a draft that does not incorporate the customer's changes discussed at the results meeting.

### 5.10.1 *Issues*

The specific issue that LSA raised in the GIP3 issue paper is that the interconnection customer and PTO deadlines for issuing and turning around drafts, potentially including penalties for missing deadlines. LSA would only support including this item (i.e., topic #10) in the GIP in conjunction with a day-for-day delay of the Second IFS Posting and a day-for-day extension in the negotiating period if the PTO provides a draft GIA agreement more than 30 days after the Phase II Study is issued. If interconnection customers are going to be held to tariff timelines, then PTOs should be held to those timelines as well.

With respect to tariff timelines, the ISO launched a new process with Cluster 3-4 requiring that any delay in either the 30 CD tendering timeline or the 120 CD negotiation period was agreed to by all three parties in writing. This would then give the interconnection customer the option to not delay either timeline and require the ISO and PTO to prioritize that customer's GIA. With the lessons learned from the trial implementation, the ISO will be requiring this written approval from all parties to the GIA for both the tendering timeline and the negotiation timeline effective with Cluster 5 and going forward.

### 5.10.2 *Stakeholder comments*

**Clean Coalition** - While we recognize the challenges of increased interconnection requests, we also observe that the GIP timeline is already too long and that the issue described here seems to be one that can be addressed simply by the addition of interconnection staff at the PTOs. As such, we oppose any extension of the GIP timelines. If timelines are not being met, the focus should be on correcting practices that result in missing timelines, not on adjusting the goal to meet performance.

That said, where the delivery of GIAs is lumped together as a result of clustered studies, reasonable accommodation can be made on issues related to delivering a large number of GIAs all within the same short window. We believe this issue may be addressed with minimal effort and should not displace other topics.

**Southern California Edison (SCE)** - Current 30-day window for tendering a draft GIA after completion of the Phase II studies and the additional ninety days to negotiate a GIA are unrealistic due to the volume of interconnection requests processed at the same time given the cluster process. In particular, the 90-day negotiation period appears to have little value in real-world experience, other than to create additional work for the ISO and PTO representatives to request extensions of the negotiation period. SCE proposes a re-evaluation of these timelines in this initiative. SCE fully supports making topics #10 and #11 high-priority queue management topics in this initiative.

**Pacific Gas & Electric (PG&E)** - PG&E supports this proposal.

### 5.10.3 *ISO straw proposal*

The proposal for this issue is to trigger the tendering of the GIA off of the interconnection customers Results Meeting date as that term is defined in the LGIP or GIP procedures versus when the ISO provides the Interconnection Facilities Study report or Phase II Study report.

The ISO invites stakeholder comments on whether they have an issue with changing the trigger for tendering of GIAs.

## 5.11 LGIA negotiations timeline

This topic was suggested by San Diego Gas & Electric Company ("SDG&E") in the March 2012 stakeholder survey. In response to stakeholder requests for improved queue management, the ISO is proposing this topic here. This topic was also recently proposed by the Large-scale Solar Association (see topic #36 in section 4.2 of the April 8 scoping proposal).

The GIP tariff, Appendix Y, at 11.2 states "The applicable Participating TO(s) and CAISO and the Interconnection Customer shall negotiate concerning any disputed provisions of the appendices to the draft GIA for not more than one hundred twenty (120) calendar days after the CAISO provides the Interconnection Customer with the final Phase II Interconnection Study report".[28] Because the ISO and the PTOs have not adhered to this 120 calendar day negotiation limit, SDG&E suggests the tariff should be modified to identify this is a suggested guideline rather than a firm deadline. SDG&E suggests the tariff language should be reworded to include the term "best efforts" and proposes the following language: "The applicable Participating TO(s) and CAISO and the Interconnection Customer shall use best efforts to negotiate concerning any disputed provisions of the appendices to the draft GIA for not more than one hundred twenty (120) calendar days after the CAISO provides the Interconnection Customer with the final Phase II Interconnection Study report."

### 5.11.1 *Issues*

If stakeholders agree to revise the trigger for tendering of GIAs (topic #10), then the negotiation timeline should also be revised to trigger off of the results meeting versus the study reports to allow at least the same period for negotiation. Additional issues that could be considered in this topic is a revision to the 30 CD tendering timeline, allowing additional time for the PTO to develop the appendices, and/or allow additional time for the 120 CD negotiation timeline.

### 5.11.2 *Stakeholder comments*

**Clean Coalition** - While commitment to the timeline has been an issue, it has not been shown that the timeline itself is an urgently pressing issue of significant impact to an efficient and effective GIP, and addressing other issues first will have greater impact.

**Southern California Edison (SCE)** - Current 30-day window for tendering a draft GIA after completion of the Phase II studies and the additional ninety days to negotiate a GIA are unrealistic due to the volume of interconnection requests processed at the same time given the cluster process. In particular, the 90-day negotiation period appears to have little value in real-world experience, other than to create additional work for the ISO and PTO representatives to request extensions of the negotiation period. SCE proposes a re-evaluation of these timelines in the IPE initiative. SCE fully supports making topics #10 and #11 high-priority queue management topics. The ISO agrees with SCE that the 90-day negotiation period may have little value from the PTO perspective, but it does establish a target bookend that allows interconnection customers to raise timing issues regarding execution of the GIA which we believe are now taken more seriously with

[28] The negotiation period was expanded from 90 CD in the serial process to 120 CD in the cluster process in GIP 2.

the implementation of the required written approval to extend the tendering and negotiating timelines.

**Large-scale Solar Association (LSA)** - LSA does not believe that this issue, as currently defined, should be included in the IPE scope for the following reasons:

- The ISO's data cover the time from issuance of the draft to execution, while the 120 days in the tariff covers only the negotiations timing. In LSA's experience, the PTOs and ISO together take several weeks to process GIAs once the parties have agreed to all the provisions.
- The fact that extensions beyond 120 days are common is an indication that the parties are generally reasonable about granting extensions, so there is no problem here that needs fixing.
- The presence of the 120-day target acts as an incentive to the parties to move the process forward to the extent that they can, and thus it serves a purpose even if it is not always binding.

LSA misunderstands the GIA tendering and negotiation timeline. In accordance with Appendix Y, Section 11.1 through 11.3, the GIA is currently tendered thirty (30) calendar days ("CD") from the final Phase II Interconnection Study report or the Facilities Study report. The negotiation period is one hundred twenty (120) CD from the same event - the final Phase II Interconnection Study report or the Facilities Study report. Once the negotiation is complete, the applicable Participating TO(s) and ISO provide to the interconnection customer a final GIA within fifteen (15) Business Days.

As discussed further below, LSA believes that this issue could be retained, with a revised scope to address some of the timing issues raised by PG&E on the stakeholder conference call, but only if additional requirements (and potential charges) would apply equally to PTOs and the ISO.

As noted above, LSA would favor retention of this item if the scope were revised to consider ways to expedite the GIA negotiation process and make it more efficient, with requirements (and potential penalties) for all parties in involved, not just developers. LSA takes note of PG&E's proposed addition (on the stakeholder conference call) to the scope of this item – charges to developers for negotiation extensions. However, contrary to PG&E's contention on the stakeholder conference call, in LSA's experience, PTOs are often responsible for delays in reaching agreement on GIAs, e.g., by:

- Producing unreasonable studies – e.g., the recent Fresno/Kern Cluster 3-4 Phase II Study – with unreasonable findings like 12-year construction timeframes that the study itself admits are unlikely to occur. Such study results have required developers to seek additional qualifying language in their GIAs in order to mitigate the damage to their prospects of acquiring a PPA and/or financing their projects of such unreasonable study findings.

- Taking unreasonable negotiation positions that impede agreement, like the recent Direct Transfer Trip classification for a particular PTO. The PTO itself was responsible for this problem by changing its Phase I (and prior) position in the Phase II Study, and then the ISO took an additional month (which delayed all affected GIA negotiations by that amount) just to confirm the previous PTO/ISO position.
- Failing to address issues raised in Results Meetings in a timely fashion afterwards. It is difficult to proceed with negotiating a GIA when there are still significant outstanding issues that are fundamental to the agreement.
- Failing to turn around GIA drafts in a reasonable time, perhaps because of workload issues. LSA members have experienced numerous situations where PTOs have taken a month or more to return draft mark-ups.

Instead of adopting PG&E's suggestion verbatim – which LSA believes has the potential to degrade into a finger-pointing exercise – LSA prefers to work with the ISO and PTOs to develop productive recommendations about how the process can be shortened and made more efficient.

For example, some developers are highly motivated to conclude GIAs and proceed with construction, e.g., because of PPA deadlines. Perhaps the ISO and PTOs could allow such developers to self-identify and then to direct ISO/PTO efforts to concluding those agreements quickly. This would give other developers who do not have such urgent timelines additional time to address issues that might otherwise impair their ability to conclude and execute their GIAs.

Similarly, it may be more efficient to separate out difficult issues common to multiple projects and focus attention on resolving those issues quickly while resolving remaining issues in individual negotiations. This would probably be more efficient than trying to address those difficult issues in numerous separate negotiations that hold up conclusion of all those agreements.

Finally, LSA would like to discuss how to shorten the several-week PTO/ISO processing time for completed agreements. This issue would be a cooperative effort between the parties to develop productive recommendations about shortening the GIA negotiations process and making it more efficient. This effort could include, for example:

- Phase II Study content or format changes to better facilitate the GIA development process;
- GIA negotiation prioritization, to allow projects with PPA deadlines or other urgent deadlines to proceed more quickly with their GIA negotiations (and, potentially, construction sequencing);
- Separate expedited process for resolving difficult issues common to multiple projects, while resolving remaining issues in individual negotiations; and/or
- Changes to shorten the several-week PTO/ISO processing time for completed agreements.

### 5.11.3 *ISO straw proposal*

The proposal to address this issue is multi-faceted. First, the ISO would propose to add the words, "use best efforts to" in the negotiation sections of the ISO tariff. Second, the ISO would propose to trigger the negotiation period off of the Results Meeting if stakeholders agree with Topic # 10 to ensure the timeline is maintained. Third, the ISO and PTOs have already worked together to develop a template for the study results. With this template we have found that transferring the required data to the GIAs is easier. With respect to LSA's suggestion to prioritize GIA negotiations, if the stakeholders want to do that, the ISO could consider it, and to implement such a structure the ISO would just need some logistical discussions to frame the solution and then determine if this is an process that can be implemented or something that needs to be documented in the tariff. However, the ISO has implemented a "prioritization opportunity" by default, requiring all three parties to agree in writing to extend the tendering and negotiating timelines. But if we were to implement LSA's suggestion, as an example the following questions come immediately to mind:

- Does the prioritization occur within the current timelines?
- If no, what timelines?
- If no, does the trigger change to when the customer requests to start the GIA process?
    - If yes to the above, how do we ensure that project are continuing to develop and achieve COD?
    - Would we want to put a "no longer than timeframe" in place?

Then the last suggestion of LSA is to shorten the several-week PTO/ISO processing time for completed agreements. While this sounds easy, it is easier said than done. The first processing time is currently fifteen (15) business days from completion of the negotiation process. During this timeframe, the ISO is proofing the GIAs; ensuring that the parties to the agreement are the correct legal entities to execute the agreement otherwise an assignment of the project has to be processed; the term of the agreement is consistent with the information request sheets; the contacts are consistent with the individuals determined by the legal entity that will be signing the agreement; the terms and conditions are consistent with the study results and if they disagree then the differences need to be reconciled and either a study addendum issued for the project or the agreement revised; and if the GIA is for a QF, the affidavit needs to be validated before the GIA is released for execution. In addition, this workload has to be sequenced in with other workload and employee time. However, the ISO is willing to consider decreasing this 15 business day period down to ten (10) business days from completion of the negotiation process provided the interconnection customers agree to provide information request sheets in advance of concluding the negotiation.

The additional processing timeline in the tariff is for filing at FERC, if required. The tariff states that as soon as practicable, but not later than ten (10) Business Days after receiving either the executed originals of the tendered LGIA (if it does not conform with a FERC-approved standard form of interconnection agreement) or the request to file an unexecuted LGIA, the applicable PTO(s) and ISO shall file the LGIA with FERC, as necessary, together with an explanation of any matters as to which the interconnection customer and the applicable Participating TO(s) or ISO disagree and support for the costs that the applicable PTO(s) propose to charge to the interconnection customer under the LGIA. Because this filing needs to be written, reviewed and coordinated with both the business units and legal departments of both the ISO and applicable PTO(s) there is no ability to shorten this timeline.

The ISO invites stakeholders to comment on the following:

- Do Stakeholders agree with the best efforts language?
- If stakeholders agree with triggering the tendering of agreements off of the Results Meeting, do you agree with triggering the negotiation off of the same event?
- Do Stakeholders want to change the 15 BD to 10 BD for providing a final GIA for execution?
    - If yes, do stakeholders agree that the information request sheet must be provided in advance of finalizing the negotiation?
- Are stakeholders concerned with the process of required written agreement from all three parties on extending the tendering and negotiation timeline as a proxy for prioritization?
    - If yes, then what prioritization process would you propose given the questions discussed above?

## 5.12 Consistency of suspension definition between serial and cluster

The ISO is considering updating the definition of suspension in the ISO's pro forma LGIA applicable to serial projects (Appendix BB) to make it consistent with the ISO's cluster and GIDAP LGIA versions by specifying that suspension extends up to 3 years from when the interconnection request was received, and only applies to PTO upgrades (Section 5.16 in LGIA) that do not impact other projects, and does not provide a day-for-day delay of project. The purpose of this topic is to clarify that suspension does not stay the obligation of paying invoices and to clarify that suspension does not apply to network upgrades that impact other queued projects.

In their comments on the April 8 scoping proposal, PG&E recommends the following changes to the scope:

> *"Consistency of suspension definition between serial and cluster; clarification of suspension and notice to proceed provisions in IAs"*

PG&E supports efforts to reduce opportunities for serial projects to hold speculative queue positions and to align serial processes with cluster processes. PG&E supports the proposed change in principle, but believes that as currently scoped, the impact of such change so limited that PG&E would prioritize other initiatives over this one.

If included in the IPE initiative, PG&E recommends expanding the scope of this topic to remove the requirement that interconnection customers grant permission of ‘notice to proceed’ on upgrades identified in the interconnection agreement. Once an interconnection agreement is executed, PTOs are expected to meet CODs contained in the interconnection agreement, but frequently interconnection customers’ failure to provide notice to proceed hinders PTOs’ ability to complete necessary upgrades on the timeline committed to in the interconnection agreement. Further, allowing an interconnection customer to delay any individual element until it is on the critical path for dependent projects reduces the PTO’s ability to take advantage of opportunities for efficiencies, which can result in a higher cost of network upgrades that is borne by the ratepayers. The ISO agrees with PG&E’s concerns however we believe, and have been acting upon the existing authority in the tariff and agreement, that the milestones impact all parties to the GIA and to the extent any milestones are not met on a timely basis is a reason to send a notice of breach of the GIA. Working with the PTOs, the ISO can more proactively implement this process but we do not believe the scope of this topic needs to be broaden at this time.

In addition, PG&E would like to require interconnection agreements to request suspension of PTO work through an official suspension of the interconnection agreement. To the best of the ISO’s knowledge, interconnection customers who desire to suspend their project in accordance with section 5.16 of the LGIA have provided notice and the ISO actually does an assessment to determine if the request can be approved. Since we already have a working mechanism, the ISO does not believe that resolution of this issue needs to be incorporated in the scope of IPE and we will be happy to discuss the process further with PG&E.

PG&E states that, moreover, further reform of serial processes is critical to create a more equitable process that is fair to ratepayers and generators overall, as the queue still contains 12.8 GW of pre-Transition Cluster generation, all of which has been in the queue for more than five years and the oldest of which dates back to 1998.

While PG&E agrees with the proposed change, unless the scope is broadened they believe the impact of such a change on the overall queue is very limited. As discussed above, unless ISO broadens the scope of this topic ISO should prioritize topics that have a greater impact on improving processes for the overall queue.

### 5.12.1 *Issues*

Suspension for SGIP projects is currently not allowed.

### 5.12.2 *Stakeholder comments*

**AES Solar** - disagrees that this issue should be included in the IPE scope. The concern is that only some of the serial agreements would be effected and it could be counter-productive. By applying this change to GIAs in negotiation or far along in the process would be controversial and contrary to ISO precedent and likely impede execution of the agreements.

**Clean Coalition** - We believe this issue may be addressed with minimal effort and should not displace other topics.

**Pacific Gas & Electric (PG&E)** - PG&E would prioritize other issues above topics #4, #5, and #12. With respect to item #12, while we agree with the proposed change, unless the scope is broadened we believe the impact of such change on the overall queue is very limited. Unless ISO broadens the scope of this topic as proposed, ISO should prioritize topics that have a greater impact on improving processes for the overall queue.

**Large-scale Solar Association (LSA)** - LSA does not believe that this issue should be included in the IPE scope, because this change:

- Would apply to only a limited number of agreements. The CAISO clarified that already-executed GIAs would not be affected by any change.
- Could be counter-productive. As LSA noted on the stakeholder conference call, proposing to apply this significant change to suspension rights for projects already in GIA negotiations or far along in the process would:
- Be controversial and contrary to past CAISO precedent (and thus likely to raise the suggested “Low” effort-level estimate); and
- Probably impede, not encourage, conclusion and execution of those agreements.

Moreover, LSA notes that the first proposed revision – limiting suspension rights to three years from IR submittal – would effectively remove suspension rights entirely from any serial group project that has not already executed a generator interconnection agreement, because they have all been in the queue for more than that time.

The ISO appreciates stakeholder concerns raised with this topic, and agrees that it impacts less than 50 projects; however, the issue with the serial LGIAs is the suspension can begin at any time and impact other queued projects. So while a relatively few can exercise the option to suspend, the impact of the serial project exercising the suspension right and impacting later queued customers is significant. The challenge we are having is that the serial study process assumes that all network upgrades assigned to one project were completed prior to the study of the next project. Moreover, the cluster process assumed that all serial network upgrades were completed prior to the studies for the transition cluster and Clusters 1 and 2. Because these serial group projects have been in the queue for so long there is a potential that the project could suspend, even now, and impact later queued customers as the caveat is not currently in the LGIA. If this happens, absent the LGIA not being in good standing or the suspension request would put the agreement in breach, the ISO would have to agree with the suspension request.

### 5.12.3 *ISO straw proposal*

The ISO proposes to modify Appendix V for amendments to the serial LGIA required in the future, and Appendix BB for LGIAs[29] that have not been substantially negotiated in order to specify that suspension extends up to 3 years from when the interconnection request was received, and only applies to PTO upgrades that do not impact other projects, and does not provide a day-for-day delay of project.

The ISO invites stakeholders to comment on the following:

- With the narrow focus of ensuring that other queue projects are not impacted if a serial project suspends, are stakeholders still concerned with the topic?
- Are stakeholders willing to accept the consequences if a serial project suspends and then impacts the ability for later queue projects to achieve their COD?
- Are stakeholders willing to accept the consequences if a serial project suspends and then impacts the ability for later queue projects to achieve their full capacity deliverability status?
- Do you have a better idea to mitigate this risk for later queue projects?

## 5.13 Clarity regarding timing of transmission cost reimbursement

### 5.13.1 *Background*

In its April 12, 2013 tariff amendment in FERC Docket No. ER13-1274, the ISO proposed to revise Section 11.4.1 of Appendices CC and EE to remove language in *pro forma* generator interconnection agreements that require an interconnection customer with a non-phased[30] generating facility to wait until the in-service date of corresponding network upgrades prior to being entitled repayment for the cost of those network upgrades.[31]

[29] The same text is in the same section in both Appendices.

[30] A phased generating facility is a generating facility that is structured to be completed and to achieve commercial operation in two or more successive sequences that are specified in the generator interconnection agreement, such that each sequence comprises a portion of the total megawatt generation capacity of the entire generating facility. In contrast, a non-phased generating facility is a generating facility that is structured to be completed and to achieve commercial operation in one sequence.

[31] Appendix CC of the ISO's tariff is a Large Generator Interconnection Agreement for Interconnection Requests in a Queue Cluster Window that are tendered a Large Generator Interconnection Agreement on or after July 3, 2010. Appendix EE of the ISO's tariff is Large Generator Interconnection Agreement for Interconnection Requests Processed under the Generator and Deliverability Allocation Procedures (GIDAP).

In its May 14, 2013 filing in the same proceeding, the ISO clarified that it is merely seeking to ensure its tariff is internally consistent as interpreted by a prior FERC order. The FERC had previously determined that the ISO's generator interconnection procedures provide that, with respect to non-phased projects, refunds for network upgrades begin upon the commercial operation date of the generating facility.[32] The ISO reaffirmed that its proposed changes to Section 11.4.1 of Appendices CC and EE only serve to implement the FERC's prior order and remove any ambiguity from the ISO tariff regarding what conditions apply to repayment of network upgrades cost for non-phased projects.

### 5.13.2 *Stakeholder comments*

**Pacific Gas & Electric (PG&E)** – Believes that reimbursement for delivery network upgrades should not occur until such upgrades are complete, and additional tariff clarity would be beneficial.

**Large-scale Solar Association (LSA)** – Describes this topic as having three aspects and ranks it as number 2. The three aspects are:

- Clarify that completed phased generating facilities would be treated the same as completed non-phased generating facilities; i.e., would be eligible to commence refunds once the last phase of a phased generating facility is completed and reaches COD.
- Clarify refund timing when a non-phased generating facility reaches COD before all of its network upgrades are complete.
- Consider revising the interest rate for refunds; e.g., from the current FERC rate to the participating transmission owner's actual interest rate of return.

**Southern California Edison (SCE)** – Ranks this topic as number 4. Believes that there is no basis for a difference in treatment surrounding the commencement of transmission credits for phased versus non-phased generating facilities. Believes that transmission credits should commence with the completion of two events: the commercial operation date of the generating facility (or phase for a phased generating facility) and the in-service date of required network upgrades for the generating facility (or phase for a phased generating facility). States that in extreme cases it is possible for participating transmission owners to be required to begin repayment to generation developers before all necessary network upgrades are in service and part of the ISO's transmission access charge so as to be reflected in rates.

### 5.13.3 *ISO straw proposal*

As previously described in section 5.13.1, the ISO has already addressed, and FERC has ruled on, this issue with respect to existing tariff requirements. Therefore, for customers who have already received a generator interconnection agreement, regardless of whether they represent phased or

[32] *Cal. Indep. Sys. Operator Corp.* 140 FERC ¶ 61,168 at P 7, citing ISO tariff, Appendix Y, § 12.3.2.1

non-phased projects, the ISO does not believe it appropriate to consider modifications to the existing rules in the IPE initiative. Moreover, having added the requirement for phased facilities that upgrades must first be in service before reimbursement commences in GIP 2, the ISO does not believe that policy should be revisited here. The ISO agrees, however, to consider as part of this initiative whether, going forward for Cluster 6 or 7 depending upon timing of FERC approval, cost reimbursement for network upgrades should require both that a generator have achieved commercial operation and that the network upgrades are in service.

Lastly, in response to LSA's suggestion that consideration be given to revising the interest rate for refunds, the ISO is not including the topic of revising the interest rate for refunds within the scope of this topic.

## 5.14 Distribution of forfeited funds

Current procedures provide for retention of certain portions of interconnection customer study deposits and interconnection financial security (IFS) postings upon withdrawal of an interconnection request from the ISO generator interconnection queue. These funds are currently distributed in the same manner as the ISO distributes the funds collected as penalties assessed to market participants – i.e., distributions are made to scheduling coordinators in proportion to the amount of grid management charge ("GMC") that each scheduling coordinator paid during the calendar year in which the funds were collected. A number of stakeholders have suggested that the stakeholder process investigate whether there are more appropriate ways to distribute these funds, in particular to reduce the costs of the generator interconnection process or the costs of constructing transmission facilities needed to support generator interconnections.

This section provides some additional background information, summarizes stakeholder comments and provides some initial ISO responses to those comments. The ISO responses try to highlight some of the concerns about the incentives facing interconnection customers that motivated the design of the current approach for redistributing forfeited funds. At this point the ISO does not have a specific proposal to offer, and requests that stakeholders in their next round of written comments offer some specific ideas for alternative approaches.

### 5.14.1 *Amount of forfeited funds 2009-2012*

As additional background information for this topic, stakeholders have requested that the ISO indicate the dollar amounts of study deposit and IFS funds that have been forfeited and distributed to scheduling coordinators. Table 6 below provides forfeited study deposits and financial security amounts since 2009. The total forfeited amounts distributed to scheduling coordinators since 2009 is almost $36.0 million, including interest. This amount comprises approximately $26 million in study deposits and approximately $10 million in financial security.

| Table 6 – Amount of forfeited funds 2009-2012 | |
|---|---|
| **Forfeited Funds** | **Total** |
| Forfeited Study Deposits - 2012* | $11,755,008 |
| Forfeited Financial Security Instrument Deposits - 2012* | $4,143,252 |
| | $15,898,260 |
| | |
| Forfeited Study Deposits – 2011 | $1,399,899 |
| Forfeited Financial Security Instrument Deposits - 2011 | $4,931,615 |
| | $6,331,514 |
| | |
| Forfeited Study Deposits – 2009 | $11,350,286 |
| Forfeited Study Deposits – 2010 | $1,209,879 |
| Forfeited Financial Security Instrument Deposits - 2010 | $805,819 |
| | $13,365,984 |
| | |
| Total Forfeited Amounts | $35,595,758 |
| **Estimated 2012 collections (not yet distributed)* | |

### 5.14.2 *Timeline for implementing potential tariff changes*

Based on the 2013 timeline for the IPE stakeholder process and approvals from the Board and FERC, the earliest implementation for tariff changes would be February 2014 (see Table 7 below). If we retain the timetable by which forfeited funds are re-distributed today, tariff changes regarding the distribution of forfeited funds approved by FERC in 2014 would become effective prospectively. If we consider the approach as applying annually, then the change would be implemented for forfeited funds collected in 2015, which would typically be re-distributed in 2016.

**Table 7 – Timeline for implementing potential tariff changes**

| Step | Date | Milestone |
|---|---|---|
| Stakeholder Process | April – October 2013 | Stakeholder Input |
| Board Approval | December 2013 | Board of Governors Meeting |
| FERC Approval | February 2014 | 60 days from Board approval |

### 5.14.3 *Stakeholder comments*

Below are the written comments received from stakeholders in response to the March 2012 GIP 3 issue paper and the April 8, 2013 IPE scoping proposal regarding the future treatment of forfeited study deposits and financial security funds, and some initial ISO responses to those comments. Based on these comments, most stakeholders favor developing a different way to distribute forfeited funds to replace the existing approach and desire to distribute the funds in ways that will offset or reduce the costs of interconnection (e.g., the cost of studies or the construction costs for transmission facilities).

**Large-scale Solar Association (LSA) -** Questions whether the current approach of distributing forfeited IFS funds to scheduling coordinators is just and reasonable. It is unclear why it is appropriate for scheduling coordinators to be entitled to forfeited funds paid by developers for interconnection studies or transmission construction. Believes these funds should go toward costs of interconnection studies or transmission construction.

*<u>ISO response:</u>* FERC has already determined that the ISO's distribution of forfeited IFS funds is just and reasonable. However, the ISO is willing to explore with stakeholders other ways of distributing forfeited IFS funds. The retention rules for interconnection study deposits and financial security are designed to ensure that interconnection customers have a sufficient stake in the process, to deter frivolous project proposals and subsequent project withdrawals. When a project withdraws from the interconnection queue the study costs and/or construction costs typically increase for those remaining in the queue. The use of forfeited IFS funds to offset resulting cost increases for projects remaining in queue could be a way to mitigate impacts of withdrawals on other interconnection customers.

**California Wind Energy Association (CalWEA)** - Interconnection customers should be allowed to use the non-refundable portion of their study deposit towards study deposit in the next cycle for the same project – one such deferment to be allowed.

*<u>ISO response</u>:* As mentioned in the ISO response above the retention rules are designed to deter project withdrawals. This proposal from CalWEA would undermine that design objective by making withdrawing projects beneficiaries of the forfeited funds.

**Bay Area Municipal Transmission group (BAMx)** – The non-refundable portion of financial security deposit should be applied to reducing the transmission access charge ("TAC") as opposed to refund to scheduling coordinators.

*<u>ISO response:</u>* The transmission access charge ("TAC") is the mechanism for recovering the PTOs' transmission revenue requirements ("TRR"). The ISO bills this charge to load and exports. Applying the forfeited funds to the TRR would reduce the TAC and thereby benefit ratepayers who ultimately bear the costs of the transmission upgrades. This proposal does directly relate to

offsetting the costs associated with generator interconnections, but in this case the benefits go directly to transmission ratepayers rather than to subsequent interconnection customers.

**Clean Coalition** - It seems reasonable that these forfeited funds should be used to reduce the study costs of other projects in the same queue cluster, especially to offset increased assessments that result from an interdependent project dropping out. We want to avoid individual projects receiving a net benefit from the withdrawal of a related project, so funds should first be used to offset increased costs to affected projects and then the balance should be spread across all interconnection customers.

**Tenaska Inc.** - The forfeited proceeds from study deposits and IFS should be distributed to other developers of projects in the same queue cluster study group on a pro rata basis with the MW amount of their executed LGIA. As the ISO is recovering enough funds to cover the cost of remaining projects in the queue, this distribution would help offset the cost of interconnection studies for remaining projects.

*ISO response:* Both Clean Coalition and Tenaska propose to distribute forfeited funds to the remaining projects in the queue cluster from which a project withdraws to offset interconnection study costs for that cluster. The ISO does not see how this could practically work from a timing perspective, assuming we retain the current timetable for re-distributing forfeited funds on an annual basis. To take an example, projects entering queue cluster 6 in April 2013 submit their study deposits at that time. In general, any withdrawals of projects from cluster 6 would not occur until early 2014 at the earliest, after the ISO provides the Phase I study results. The forfeited funds collected by the ISO in 2014 would then be re-distributed in 2015, which would be after cluster 6 Phase II studies are completed. Moreover, if any cluster 6 projects withdraw in 2015, their forfeited funds would not be distributed until 2016. The ISO therefore believes it is not practical to distribute forfeited funds to benefit only the same cluster from which the projects withdrew unless we also change the timetable for re-distributing funds, which will make this topic more complicated. In addition, it is important that any use of forfeited funds to offset study costs not undermine the objective of deterring frivolous project proposals by making the study costs too inexpensive.

**Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California ("Six Cities")** - Non-refundable portions of study deposits and security postings should not be distributed to all scheduling coordinators, because the market as a whole does not bear the risk of adverse consequences associated with project abandonment. Rather, forfeited funds should be applied for the benefit of transmission customers, other interconnection customers, or the relevant PTO(s) depending on the anticipated consequences of a project dropping out of the queue. The goal should be to apply the forfeited funds in a way that offsets, to the maximum extent possible, the adverse impacts of project abandonment for the benefit of the entities that bear the risk of those cost impacts. Addressing this issue is extremely urgent given the ISO's on-going efforts to address concerns relating to over-subscription of the interconnection queue.

*ISO response:* The ISO understands the rationale of Six Cities' comments and looks forward to Six Cities' suggestions for how to implement their principles.

**Southern California Edison (SCE)** - The ISO and stakeholders should explore the possibility of using at least a portion of forfeited funds to offset the PTOs' incurred costs for the incremental work related to performing technical studies and developing generator interconnection agreements which are not currently being recovered. SCE, and ultimately ratepayers, continues to incur significant costs in the performance of technical studies and development of interconnection agreements. Distribution of forfeited funds to PTOs would be an equitable approach as there is a cost-causation link between the interconnection customers and the PTOs who have performed a substantial amount of work on their behalf.

*ISO response:* The PTO is already reimbursed for all study costs and should not be reimbursed twice. However, with GIDAP a question has arisen as to which study process should be charged for the addendums of earlier queue projects that result from the annual reassessment.

**Pacific Gas & Electric (PG&E) -** In instances when a generator withdraws after the second IFS posting, and the PTO is still required to build the entire network upgrades anyway (as called for in the Phase II Study), the PTO essentially picks up the portion of the costs that would have otherwise been upfront funded by the withdrawing generator which has the effect of shifting the risk of abandonment onto the PTO and/or its customers. It could be more equitable to the PTO and its customers if, in this circumstance, the forfeited funds went toward the general cost of the shared upgrades and the ISO and scheduling coordinators received whatever remained, if any. This alleviates some or all of the shift in risk that occurs under the current tariff. The way tariff section 9.4.2.6 is written today, unless the PTO has made use of the second IFS posting already, it surrenders [to the ISO] anything that wasn't refunded to the IC.

*ISO response:* This comment refers to the provision of Appendix Y whereby the PTO must turn over to the ISO any portion of the withdrawing interconnection customer's IFS posting that was not already used. The proposal would apparently apply any such remaining portion of the forfeited funds directly to the cost of the upgrades for which the IFS posting was made, avoiding the process of turning these funds over to the ISO for subsequent re-distribution, which may be most expeditious in situations where the associated network upgrades are still required.

**PG&E** – In instances when revised (operational) studies dictate that the scope of the network upgrades that were originally called for in the Phase II study be reduced, as a result of a generator withdrawal, the ISO and scheduling coordinators could be entitled to a greater portion (or even 100%) of the forfeited funds, much as is done with forfeited funds today.

<u>*ISO response:*</u> This proposal would retain the existing distribution process via scheduling coordinators and, as such, departs from the general sentiment of most stakeholder comments that the scheduling coordinator approach should be abandoned.

**PG&E** – Supports evaluating whether changes can be made to the third IFS posting to protect against stranded costs due to terminated or delayed GIAs. Supports evaluating whether current IFS forfeited funds distribution practices are optimized to protect against stranded costs. First and second IFS posting requirements should remain unchanged.

<u>*ISO response:*</u> The third IFS posting is not due until the GIA has been executed and the PTO commences construction activities. The proposal to evaluate whether the rules governing the third IFS posting adequately protect against stranded costs due to terminated or delayed GIAs is directly related to offsetting the costs of interconnection procedures. The ISO agrees that this question should be discussed in the context of this topic. Another consideration for the forfeited funds is to allow the ISO and PTO to use the funds for study costs previously incurred that an interconnection customer defaults on.

## 5.15 Inverter/transformer changes

Stakeholders want to allow certain project revisions without a need for a Material Modification Assessment and are looking for more transparency in the modification process. Over the past year, the ISO and PTOs have put in place significant process structure around requests for modification and are now in a position to better communicate that structure to stakeholders and commit to developing language in this initiative to be included in the BPMs. Once developed, the ISO would propose to add the language to the BPM for GIP and similar language in the new BPM for the GIDAP.

### 5.15.1 *Stakeholder comments*

**Pacific Gas & Electric (PG&E)** - PG&E understands that the rapid pace of technology change in the inverter/transformer field may result in the need to modify interconnection agreements to accommodate new equipment. While PG&E believes the current material modification process is flexible enough to accommodate this type of a request, we also recognize that streamlining evaluation processes could be beneficial. Thus, PG&E is open to further exploration of this topic.

**Large-scale Solar Association (LSA)** - Allowing certain project revisions (e.g., inverter/transformer manufacturer changes) without the need for a Material Modification Assessment (see comments above on topic #6).

The ISO will be prepared to discuss the modification process at the Stakeholder Meeting scheduled for June 11th and will have draft BPM language available for the draft straw proposal currently scheduled to be posted on July 18th.

# 6 Topics being addressed outside this initiative

As the ISO discussed in the April 8 scoping proposal, there are two efforts underway at the ISO outside of this IPE initiative to address stakeholder concerns on the two topics described below. These efforts are being conducted separate from the IPE stakeholder process and stakeholders have opportunities to participate in those efforts separately. The ISO has reviewed written stakeholder comments received on these two topics and will consider these comments as it develops its materials in the affected system and deliverability methodology efforts (outside the IPE initiative).

## 6.1 Affected system coordination

This topic was suggested by the Large-scale Solar Association and Pacific Gas & Electric Company in the March 2012 stakeholder survey. Support for examination of this topic was also recently expressed in written stakeholder comments by LSA, PG&E, Imperial Irrigation District ("IID"), and Modesto Irrigation District ("MID").

These stakeholders suggested that the ISO provide additional clarity and transparency regarding how affected systems will be treated. Stakeholders also have suggested that the study of upgrades for affected systems should be incorporated into ISO studies and processes or at least coordinated better with them because the current practices can drag out the interconnection study process and increase uncertainty for developers.

The ISO is in the process of developing material that will clarify what the ISO will do in situations regarding affected systems. This process will include posting materials, holding a conference call or meeting, and an opportunity for stakeholder comments. Following this, the ISO envisions that the materials developed with stakeholders will be used as an input into the Business Practice Manual ("BPM") Change Management Process, where the ISO will propose changes to one or more of its BPMs and stakeholders will have additional opportunities to submit comments. The ISO anticipates that the first materials will be posted within the next two months.

### 6.1.1 *Stakeholder comments*

Written comments on this topic from stakeholders in response to the April 8, 2013 scoping proposal included the following:

**Large-scale Solar Association (LSA)** – One issue raised by LSA is coordination with outside entities. This issue would involve a CAISO effort to engage key outside entities in a cooperative effort to coordinate and streamline their activities concerning generator development and interconnection. These outside entities would include, at least:

- Common Affected Systems: These entities include the City and County of San Francisco, Modesto Irrigation District, Turlock Irrigation District, Imperial Irrigation District *(add others* *as appropriate)*. The goal would be to better define: (1) Affected System participation in the CAISO process; (2) their own process and timing for studying affected generators (perhaps with revisions to their own tariffs, which typically only address direct interconnection to their systems) and developing least-cost solutions for mitigating any project impacts; and (3) the applicable process for resolution if CAISO and Affected System study results are different.

- CPUC: The goal would be to better coordinate the timelines for procurement activities under CPUC jurisdiction and the CAISO study process (e.g., for financial-security postings).

A second issue raised by LSA is coordination with outside entities. LSA understands that the CAISO has no authority over Affected Systems (AS) or the CPUC for their respective activities related to generator interconnections on the ISO system. However, the ISO should understand that the actions of these entities can greatly impact developer actions in the ISO interconnection process. For example, developers are understandably reluctant to execute GIAs (or post security) when they do not yet know whether they will be on a procurement short list or while possibly costly AS negotiations are still unresolved. The current ISO interconnection process appears to give Affected Systems the ability to self-identify and impose financial (and other) requirements on developers, with no specific provisions in their own tariffs (which typically only govern interconnection to their own systems. Likewise, there are numerous instances (e.g., current Cluster 3-4 and Cluster 5 posting deadlines) where the timelines for procurement activities under CPUC jurisdiction do not match those in the ISO interconnection-study process. LSA would like the ISO to work with these entities and to least attempt to reach at least some mutual agreements about timelines and other coordination issues. Any progress in this area would also facilitate the ability of developers to move forward in the ISO process.

**Pacific Gas & Electric (PG&E)** – PG&E supports LSA's proposed topic, and suggests the following revised description:

> *IPE will evaluate how best to Incorporate affected system upgrade studies into ISO studies and processes, or at least coordinate better between the two (e.g., standard timelines). While CAISO does not have jurisdiction over affected systems, this stakeholder process may result in engagement with affected systems, similar to the CAISO's recent FERC Order 1000 interregional compliance efforts, to develop a joint study process that aligns with the GIP study process. Common processes developed by the coordination would be incorporated into the tariff.*

PG&E supports LSA's proposed topic to be included in the IPE, and agrees this is a critical issue. It is clear that a more robust, inclusive and coordinated process should be established. While ISO does not have jurisdiction over affected systems, PG&E believes a well-defined process can and should be established under the tariff to ensure that coordination with affected systems is well coordinated and does not result in projects unfairly being held up (either in the negotiation of an agreement or in their commercial operation) by affected systems whose standards processes are not clearly defined. Similar to the process ISO recently went through with neighboring regional entities to align aspects of each others' transmission planning processes as part of the interregional requirements portion of FERC Order 1000 compliance, PG&E encourages ISO to commit to working with affected systems to develop a joint study process temporally aligned with the GIP study process, and incorporating agreed upon provisions clarifying affected system coordination both into the tariff.

**Imperial Irrigation District (IID)** and **Modesto Irrigation District (MID)** - MID and IID strongly support calls by other stakeholders, in particular the LSA, to address issues associated with affected system studies, and to improve coordination among neighboring systems. MID and IID believe that the needs of the ISO, developers, and affected systems would be better served by developing concrete, tariff-based procedures that spell out the process to be followed and the obligations of all parties, in order to streamline the process and provide certainty. Both MID and IID have been identified at various stages of the ISO GIP as affected systems and have therefore been in active discussions with generators that are interconnecting to the ISO controlled grid, but whose resulting flows affect their systems. Additionally, MID and IID expect upcoming large clusters of projects in the ISO interconnection queue to affect their systems. Currently, the ISO tariff lacks specificity with respect to both the process for anticipating and addressing possible issues, and the obligations of the parties. This current confusion helps no one. Affected systems lack information to assess when and how to best participate in the ISO study process and the identity of developers with whom to engage; there are not clear sets of assumptions; developers are often caught by surprise late in the development cycle, and the rights and obligations with respect to the payment for needed upgrades and timing of safe interconnection to the grid, as those issues pertain to affected systems, are not specified clearly in the Tariff. Given the importance of this issue with known generation requiring study by both the ISO and the affected systems, resolution of this matter should not be delayed. Further, it is simply inadequate to shunt this issue to the BPM process, as proposed, with unspecified milestones, since the provisions of the tariff will be implicated in any event. While GIP improvements are being considered, it makes sense to tackle the issue of affected systems now.

## 6.2 Review of GIP reliability and deliverability study methodologies

This topic was suggested by the California Wind Energy Association (CalWEA) in the March 2012 stakeholder survey. Support for examination of this topic was also recently expressed in written comments from PG&E, BAMx, and CalWEA.

Some stakeholders believe that the GIP's underlying technical study methodologies (both reliability and deliverability) severely over-estimate the need for transmission upgrades and are in need of reform. The ISO recognizes that additional information on the GIP reliability and deliverability study methodologies would be helpful to stakeholders and is undertaking an effort separate from IPE to explain and discuss with stakeholders in detail how the methodologies work.

The ISO has been engaging with stakeholders on this topic on several occasions over the past two years, with a goal of explaining how the methodology works and the results that come from its use. Most recently, the ISO provided a Generator Interconnection and Deliverability Study Methodologies training session on December 4, 2012. The training provided a forum for market participants and other interested parties to gain an understanding of the ISO generation interconnection and deliverability study methodologies. Stakeholders were given an opportunity to provide written comments on the Interconnection and Deliverability Study Methodologies. The ISO posted responses to those written stakeholder comments on March 5, 2013 (see http://www.caiso.com/Documents/ISOResponses-Comments-DeliverabilityMethodologyTraining.pdf). The ISO is currently preparing a technical paper in response to stakeholder comments that will provide detailed, realistic examples of applying the deliverability methodology and elaborate on the December 4, 2012 training presentation. The technical paper will be available in July 2013. The ISO will hold a stakeholder meeting to discuss the technical paper and stakeholders will be provided with an opportunity to provide written comments on the technical paper.

### 6.2.1 *Stakeholder Comments*

Written comments on this topic from stakeholders in response to the April 8, 2013 scoping proposal included the following:

**Pacific Gas & Electric (PG&E)** - PG&E is supportive of providing additional training to stakeholders outside of GIP 3, including ISO's "plans to post a technical paper in July 2013." PG&E sees substantial value in providing more transparency to stakeholders on how the deliverability methodologies are applied. While PG&E does not support changes to the existing methodologies determining project deliverability allocations, PG&E believes current processes to determine whether delivery network upgrades are classified as 'area' or 'local' should be better defined via the technical paper (and, as noted below, via the BPM). PG&E notes that Dr. Songzhe Zhu's testimony in ISO's GIDAP tariff filing1 provides additional detail as to the methodology, but that this methodology is not fully fleshed out, nor has it been articulated in the tariff, BPM or in a technical bulletin. PG&E recommends that the technical paper address Dr. Zhu's testimony in more detail. For example, the technical analysis by which ISO determines which delivery constraints are 'local' versus 'area,' what constitutes a 'few buses electrically close to each other', a 'substantial number of generators' impacted by a constraint, a 'high cost of upgrades', etc. PG&E also notes this topic can be further addressed through clarification in the draft GIDAP BPM, and PG&E intends to provide such comments in the next round of stakeholder feedback on the BPM.

**Bay Area Municipal Transmission group (BAMx)** (consists of Alameda Municipal Power, City of Palo Alto Utilities, and City of Santa Clara, Silicon Valley Power) - While we understand the ISO's preference is to keep this issue bifurcated from the GIP reform, we are concerned that such separation keeps this review of the ISO's Deliverability Methodology and the resultant information available to decision makers on a slower schedule to resolution. BAMx would support a separate initiative to allow greater focus if it also were accompanied by a specific work plan and schedule to drive it to resolution. Unfortunately this has not been the case to date and progress on this important issued has lagged while billions of dollars are or will be spent on transmission system upgrades based upon findings supported by this methodology. As the window of opportunity for meaningful reform narrows as more transmission projects move beyond the planning and permitting stage, this topic should be elevated in the discussion of GIP enhancement. As the ratepayer benefits of even small incremental improvements would outweigh the value of all other queue management topics combined, if moving this topic into the GIP enhancement process is necessary to move it forward, then that is what should be done.

**California Wind Energy Association (CalWEA)** - We are hopeful that the long stalled process of reviewing the CAISO technical study process for deliverability assessment will soon be revived by the CAISO.