



California ISO
Shaping a Renewed Future

Issue Paper

Generator Interconnection Procedures Phase 3

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Market and Infrastructure Development

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1. Introduction

The ISO is committed to continuously improving its Generator Interconnection Procedures (“GIP”) to reflect changes in the industry and to better accommodate the needs of generation developers seeking to interconnect their projects to the ISO-controlled grid. Consistent with this commitment, the ISO has conducted a series of stakeholder processes over the past three years to improve the GIP. With this issue paper, the ISO is beginning its next GIP improvement effort, which is titled Generator Interconnection Procedures Phase 3 (“GIP 3”).¹ The GIP 3 stakeholder initiative is intended to develop further enhancements to the interconnection procedures that have thus far been identified as needed by stakeholders and the ISO through the following sources:

- During the course of last year’s GIP 2 stakeholder process, stakeholders and the ISO identified additional issues that warranted further consideration but could not be addressed within the Phase 2 time frame;
- Outside of the GIP stakeholder process, individual stakeholders have identified other suggested GIP changes over the past year; and
- The ISO and the Participating Transmission Owners (“PTOs”) have identified additional areas of the GIP that may warrant changes based on implementation experience.

It is on the basis of such stakeholder input that the ISO is launching this initiative and seeks further stakeholder input on generation interconnection issues that should be considered in GIP 3. While there will likely be many potential GIP issues and associated improvements proposed in GIP 3, each of these will carry a particular level of urgency or priority relative to the others that may suggest addressing these issues in a particular order or sequence. For example, a major issue identified in GIP 2 was the extent to which an interconnection customer could “downsize” a project without incurring significant negative consequences. The ISO and stakeholders agreed to “park” that issue in GIP 2, and instead address it in GIP 3. This particular issue has become a significant point of discussion over the last several months, with stakeholders requesting that the ISO address this issue as soon as possible.

Since there are likely to be many topics to address in GIP 3 (just as there were in GIP 2), the ISO proposes to split the GIP 3 stakeholder process into two “phases” so that higher priority issues (like the downsizing issue) that have significant commercial implications for developers can be addressed immediately and not have to wait for other topics to be resolved. The ISO has found from the GIP 2 experience that if it endeavors to address all of the GIP topics at once, the diligence with which topics can be addressed will be compromised and Board of Governors approval will be delayed. The ISO is targeting completion of the first phase (i.e., resolution of the higher priority GIP 3 issues) in time for a July 12-13, 2012 decision by its Board, followed by a tariff filing with FERC in August 2012. The ISO proposes that other topics (i.e., those in the second phase) would be taken to the Board for approval at the December 13-14, 2012 Board of Governors meeting.

Another consideration is the length of time it may take to reach resolution on some issues. There are topics (for example, modifications to the Independent Study Process and Fast Track Study Process) that may require many months (and perhaps even up to a year) to develop the needed changes. Although such issues will not fit within the timeline for first phase of GIP 3,

¹ The prior three stakeholder processes were titled Generation Interconnection Process Reform (“GIPR”), Generation Interconnection Procedures Phase 1 (“GIP 1”), and Generation Interconnection Procedures Phase 2 (“GIP 2”).

and may not fit within the timeline for the second phase of GIP 3, the ISO nevertheless suggests that it may be prudent to start work on such topics right away through a work group or work groups, or some other means, to avoid unnecessary delays.

Section 3 of this issue paper presents a list of the topics that are candidates for inclusion within the scope of GIP 3. Section 4 provides preliminary descriptions of the topics listed in Section 3 that the ISO proposes be considered for the scope of GIP 3.

The ISO will compile a comprehensive list of candidate topics for consideration within the scope of GIP 3 following receipt of written stakeholder comments on March 23. Next, the ISO will work with stakeholders to determine which topics can reasonably be included in the first phase of GIP 3 that will be taken to the Board meeting on July 12-13. To help expedite work on high priority topics, stakeholders are invited to submit written comments and specific proposals to address issues that they would like considered as high priority.

Although the ISO intends to address a reasonable number of topics in GIP 3 raised by stakeholders, it is important to note that some topics may need to be deferred to a subsequent GIP enhancement initiative. As already stated, the ISO is committed to continuously improving its GIP to reflect changes in the industry and the needs of its interconnection customers. The ISO intends to conduct subsequent GIP enhancement initiatives, even annually if needed, to keep pace with an industry that is evolving more rapidly than ever before.

2. Stakeholder Process and Next Steps

The ISO proposes the following timeline of activities for GIP 3.

Phase 1: High Priority Items to take to Board in July 2012

Mar 2	Post issue paper
Mar 15	Stakeholder meeting (1:00 – 4:00 p.m.)
Mar 23	Stakeholder comments due
Apr 10	Post straw proposal <u>on only the Phase 1 high priority items</u>
Apr 17	Hold stakeholder meeting (10:00 a.m. – 4:00 p.m.)
Apr 30	Stakeholder comments due on high priority items
May 14	Post draft final proposal on high priority items
May 21	Hold stakeholder meeting (10:00 a.m. – 4:00 p.m.)
Jun 4	Final stakeholder comments due on high priority items
Jul 12-13	Present high priority items to Board of Governors
Aug 31	File high priority items at FERC

Phase 2: Other Items to take to Board in December 2012

Jul 26	Post straw proposal on other items
Aug 9	Hold stakeholder meeting (10:00 a.m. – 4:00 p.m.)
Aug 21	Stakeholder comments due on other items
Sep 13	Post draft final proposal on other items
Sep 24	Hold stakeholder meeting (10:00 a.m. – 4:00 p.m.)
Oct 16	Final stakeholder comments due on other items
Dec 13-14	Present other items to Board
Jan 2013	File other items at FERC

As discussed above, one or two work groups may be initiated during the late-April to May 2012 timeframe, which would be led by ISO staff, on topics that are known to require long development times. The ISO's intent is that these work groups will work "off-line" and present periodic updates to the full stakeholder group. Those topics would eventually be taken to the Board for approval when ready.

This issue paper offers the ISO's proposed scope for the GIP 3 initiative, as well as the topics that the ISO preliminarily believes should be assigned to Phase 1, Phase 2, or sent to a work group or work groups. The immediate next steps are for stakeholders to consider this proposed scope as well as the detailed descriptions of the proposed GIP 3 topics, offer input on March 15 at the stakeholder meeting, and then by March 23 provide written comments and proposals for the high priority Phase 1 topics. Stakeholders are also encouraged to provide input on topics that should be addressed in Phase 2 of GIP 3. The ISO requests that stakeholders comment on whether any important topics may have been omitted from the proposed scope and should be included, whether any topics the ISO proposes to include should be deferred, or whether any of the detailed topic descriptions need to be revised.

Comments and proposals will be most useful if parties clearly explain the business rationale for their recommendations. The ISO will consider these comments in preparing its straw proposal for release on April 10, and at that time will provide stakeholders with both its final selection of topics for the GIP 3 scope and its straw proposals for the Phase 1 high priority topics.

Prior to the March 15 stakeholder meeting, the ISO will post a template for stakeholders to use to submit their written comments by March 23. The template will provide criteria for stakeholders to rank each of the topic discussed in this issue paper. The ISO requests that stakeholders use the following criteria to rank topics: a score of 3 would be used for topics that are high priority and urgent (i.e., a candidate for the first phase of GIP 3); a score of 2 would be used for topics that are high priority but of less urgency (i.e., a candidate for the second phase of GIP 3); a score of 1 would be used for topics that have low priority (i.e., topic could wait until next GIP stakeholder initiative subsequent to GIP 3); and a score of 0 would be used for topics that are not appropriate to address in a GIP enhancement initiative. Stakeholders should also provide input on whether a topic should be considered as a candidate for a work group because it is a topic that will require a long time to address.

3. Topics proposed for GIP 3 Scope

This section lists the topics that the ISO proposes to consider for the overall scope of GIP 3. More detailed descriptions of these topics are provided in section 4 below.

The topics that the ISO considers to be high priority Phase 1 topics for presentation to the ISO Board on July 12-13, 2012 are:

1. Ability for interconnection customers to downsize the MW capacity and/or delay the commercial operation date of proposed generating facilities when such requests have been determined to be have a material impact on later queued projects; and
2. Determine the most appropriate way to distribute forfeited study deposit and financial security funds.

The topics for which the ISO proposes that work would start in the late-April to May 2012 timeframe through a work group or work groups (that would be led by the ISO) due to the significant amount of time anticipated for resolution are:

3. Develop improved screening criteria for Independent Study Process; and
4. Develop improved screening criteria for the Fast Track Study Process.

The topics that the ISO proposes be considered as lower priority Phase 2 topics for presentation to the ISO Board on December 13-14, 2012 are:

5. Develop criteria for behind the meter expansion without requiring a project to go through the complete interconnection process;
6. Develop a mechanism for the developer of an external transmission facility that is planned to provide gen-tie service to external generating facilities to connect to the ISO grid, to participate in the ISO's GIP and obtain reliability and delivery network upgrade requirements and deliverability status prior to identifying the specific generation projects that will utilize the transmission facility; and
7. Consider extending the number of days that the participating transmission owner would have for tendering a draft interconnection agreement to an interconnection customer.

4. Descriptions of Topics proposed for GIP 3 Scope

This section provides descriptions of the potential GIP 3 topics listed above.

1. Downsizing - Stakeholders have requested that the GIP 3 effort explore the possibility of creating an avenue enabling interconnection customers to request a downsize of generating facility MW capacity and/or delay the commercial operation date of proposed generating facilities even when such requests have been determined to have a material impact on later queued projects. There are often times when this need may arise due to circumstances beyond the interconnection customer's control; however, the current GIP prohibits the ability to downsize or delay if a later queued project is adversely affected. The current GIP does not allow an interconnection customer to pay a penalty, compensate the materially affected later queued project, or the ability to remedy the material impact in any way. The interconnection customer's only recourse is to withdraw from the queue and re-enter in a later cluster. The intent behind this topic is to determine if there is a remedy available to interconnection customers that find themselves in this position short of withdrawing from the interconnection queue.
2. Distribution of Forfeited Funds - The current GIP requires that all non-refundable portions of the Interconnection Financial Security and Interconnection Study Deposits shall be treated in accordance with ISO Tariff Section 37.9.4 as shown here:

37.9.4 Disposition of Proceeds

The CAISO shall collect penalties assessed pursuant to this Section 37.9 and deposit such amounts in an interest bearing trust account. After the end of each calendar year, the CAISO shall distribute the penalty amounts together with interest earned through payments to Scheduling Coordinators as provided herein. For the purpose of this Section 37.9.4, "eligible Market Participants" shall

be those Market Participants that were not assessed a financial penalty pursuant to this Section 37 during the calendar year.

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

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

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

A number of stakeholders have suggested that the GIP 3 stakeholder process investigate whether there is a more appropriate way to distribute these funds.

3. Independent Study Process - As the ISO and the PTOs have tried to implement the current Independent Study Process, applying the qualification screens has been very difficult. This effort will examine improving the existing screening criteria or developing better screening criteria that can be applied to a high voltage network and ultimately meet the intent of the Independent Study Process, which is to allow projects that are electrically independent from other projects to move forward on a faster pace than the annual cluster study process.
4. Fast Track Study Process - Similar to the Independent Study Process, the screening criteria for the Fast Track Study Process are adaptations of criteria used for screening distribution interconnections and have been found to not be workable for interconnections to a network transmission system. This has resulted in delays to the screening process and in few projects being able pass the process screens and qualify for Fast Track treatment. This effort will develop more appropriate screening criteria for small projects to qualify for Fast Track treatment and quickly interconnect to the ISO grid.
5. Behind the Meter Expansion - Stakeholders have suggested that the GIP 3 effort include development of criteria and procedures to allow behind-the-meter expansions of existing as well as currently queued projects. Examples of such expansions include adding wind turbines to existing solar plants (or vice versa), or adding natural gas peaker units or storage devices to renewable power plants, all while assuming that the maximum capacity output of the original requested plant is not exceeded, and therefore have no additional impact on the grid.

6. External Transmission Lines - Recently the ISO has received inquiries from developers of external transmission lines who see a business opportunity in transporting renewable energy from areas of the west that have rich wind or solar capability to the ISO to meet Renewable Portfolio Standard requirements. These transmission developer are not seeking ISO Transmission Access Charge cost recovery for the transmission project because the business model is to have the external generating facilities pay for the transmission facilities external to the ISO through charges for transmission service to the ISO point of interconnection. The apparent conundrum is that in order to sign up generation developers for this transmission service, the transmission developer needs to indicate to the generation developers whether they can get deliverability on the ISO grid. However, under the current GIP, the ISO can only provide deliverability to a generation project that submits an interconnection request, not to a transmission developer. The concept here would be to develop rules under the GIP whereby a developer of a generation-tie could apply to the GIP for interconnection studies within a cluster to determine reliability and delivery network upgrades and costs on the ISO's system for a certain quantity of eventual generation it expects to serve, with the specific generating resources to be identified at a later time. Then the transmission developer could contract with generators and offer them deliverability that the transmission developer had obtained through the GIP. Lastly, any modifications in this area would need to be consistent with the Transmission Planning Process-GIP Integration effort.
7. Timeline for tendering Draft Interconnection Agreements - Based on experience with large volumes of interconnection requests, the ISO believes it important to discuss with stakeholders the possibility of changing the timeline for tendering draft interconnection agreements by the PTO to the interconnection customer. With the large volume of interconnection requests coming in, with each cluster now containing many dozens of interconnection request, it is becoming increasingly difficult to get interconnection agreements tendered within the 30-day timeline in the GIP. The ISO intends to explore with stakeholders potentially changing the current requirement that the PTO tender a draft interconnection agreement within 30 days from the date that the interconnection study report is finalized, to be, for example, 60 days rather than 30 days.