SCE Comments in purple font

Stakeholder Comments Template

Subject: Generation Interconnection Procedures Phase 2 ("GIP 2")

Submitted by	Company	Date Submitted
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This template was created to help stakeholders structure their written comments on topics detailed in the February 24, 2011 *Issue Paper for Generation Interconnection Procedures 2 (GIP-2) Proposal* (at http://www.caiso.com/2b21/2b21a4fe115e0.html). We ask that you please submit your comments in MS Word to GIP2@caiso.com <a href="mailto:no <a href="mailto:no later than the close of business on March 14, 2011. For the 21 topics listed below, we ask that you rank each with a score of 0, 1, 2, or 3 in the space indicated (a more detailed description of each topic is contained in the *Issue Paper* at the link, above).

- 3: For topics that are high priority and urgent.
- 2: For topics that are high priority but not urgent. (i.e., topic could wait until a subsequent GIP stakeholder initiative).
- 1: For topics that have low priority.
- 0: For topics in which "the ISO need not bother."

Stakeholders need not rank or comment on every topic but are encouraged to do so where they have an opinion. The ISO will assume that a stakeholder has "no opinion" on issues for which no rank is provided.

Your comments on any these issues are welcome and will assist the ISO in the development of a Straw Proposal. Your comments will be most useful if you provide the reasons and the business case for your preferred approaches to these topics.

General Comments from SCE

SCE fully supports the continued interconnection reform process, and expects lessons learned from real-world experience to have a larger emphasis in this round of reforms.

In the Issues Identification paper, the CAISO identified a number of areas for review in this round of GIP reform effort. SCE believes the issues selected are by and large the primary issues to be addressed in this effort. However, as real-world experience is gained with the clustering study process, SCE is becoming increasingly concerned about certain aspects of the initial GIPR reforms that appear to be the cause of significant issues; moreover, these issues are not directly addressed in the Issues ID paper.

Of primary concern to SCE is that certain structures within the cluster study process mute the price signals as to the actual cost of transmission facilities. An example of this is in cases where a generator's maximum financial responsibility is limited, under certain circumstances, such as (1) when actual costs exceed the maximum financial responsibility of ICs as set forth in the Phase I study or (2) when the financial responsibility for upgrades is not covered by either withdrawing or remaining ICs and the upgrades are included in the base case for future clusters.

This backstop financing structure distorts the appropriate price signals for interconnecting generation to the grid. SCE believes that GIP2 should include a consideration of the current Phase I maximum financial responsibility ("cost cap") methodology and develop a process to review and/or adjust the method of service after the Phase II study. The direction of these adjustments could be upwards or downwards, with the objective of appropriately sizing the transmission facilities that will ultimately be constructed for generators that execute GIAs. A process exists conceptually in the GIP and RTPP that could accomplish this adjustment, but we believe GIP2 would benefit from further discussion and development of a post-Phase II adjustment mechanism. The adjustments need to be performed in a manner that informs subsequent cluster studies of the outcome of triggered upgrades as early as possible so as not to disrupt future study work. There also needs to be further discussion on IFS posting requirements in relation to a post-Phase II adjustment mechanism, as mentioned by several stakeholders in SCE's WDAT GIP stakeholder process.

In parallel, CAISO needs to address appropriate protections for PTOs that are required to upfront finance Network Upgrades for the reasons discussed above. SCE would like to add to the scope of the current reform effort an evaluation of steps to improve cost recovery assurance for such financings. SCE expects these additional issues to be addressed in Work Group #1, along with the other items included in the Issues ID paper for that Work Group.

Comments on Specific Items listed in GIP 2 Issue Paper:

1. Develop procedures and tariff provisions for cost-benefit assessment of network upgrades.

Rank 0-3: 3

Comments:

See SCE general comments above. SCE looks forward to fully understanding the CAISO proposal before it can be in a position to comment on such a proposal.

2. Clarify Interconnection Customer (IC) cost and credit requirements when GIP network upgrades are modified in the transmission planning process (per the new RTPP provisions)

Rank 0-3: 3

Comments:

SCE agrees that this issue is appropriate to include in the scope of the GIP discussions.

3. Provide additional transparency regarding Participating Transmission Owner (PTO) transmission cost estimation procedures and per-unit upgrade cost estimates;

Rank 0-3: 0

Comments:

SCE's cost estimates are appropriately conservative, consistent with industry practices for conceptual-stage projects. SCE remains open to discuss with stakeholders ways to improve the transparency of the interconnection study process.

4. Clarify applicability of GIP for a generator connecting to a non-PTO that is inside the ISO Balancing Area Authority (BAA) and wants to have full capacity deliverability status.

Rank 0-3: 1

Comments:

As SCE sees this primarily as a CAISO issue, it has no further comment

5. Explore potential modifications to the triggers that establish the deadlines for IC financial security postings.

Rank 0-3: 3

Comments:

SCE agrees this is an important issue and should be in scope for the current round of reforms. SCE is generally supportive of the proposed criteria submitted in the stakeholder meeting, which states the following:

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

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

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

SCE agrees that this is an important issue for stakeholder evaluation in this round of the GIP reform.

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

Rank 0-3: 3

Comments:

SCE agrees this is an important issue to include in the scope of the current round of reforms.

SCE does not object to the suggestion, as noted by the CAISO, to discuss with stakeholders whether it is possible to provide a more precise definition for the "start of construction", and discuss the potential of phasing-in the 100% security provision which is currently all required at the start of construction. However PTOs must be kept whole for all of the costs they have incurred on behalf of ICs

7. Clarify ISO information provision to assist ICs.

Rank 0-3: 2

Comments:

SCE believes that this issue is of relatively lower importance and ranks it a 2.

In relation to what information ISO can provide to assist developers in identifying favorable siting locations, SCE has no principal objection to the ISO providing information on "good locations" to interconnect. SCE is also mindful of and reminds the CAISO and stakeholders that such information as to "good locations" has a limited shelf-life, due to the constantly changing interconnection landscape. Therefore, the value of such information is limited. SCE is interested in exploring a paradigm whereby more information can be shared with potential ICs regarding the state of the transmission and

distribution system prior to submittal of an Interconnection Request. However, this expanded visibility to the electrical system cannot be allowed to jeopardize the safety, security, or reliability of the electrical system.

The ISO mentions such information is provided on a secure website, which SCE views as a necessary safeguard, and such information will be "non-confidential", which SCE also views as a necessary safeguard. SCE remains concerned that it can consistently provide such information for the distribution system. SCE is also concerned that the task of making this information available, although designed to make the transmission planners lives easier due to potentially higher quality projects/less churn, will consume the same planning and engineering resources that are needed to conduct the interconnection studies and thus may be counterproductive.

8. Consider partial capacity as an interconnection deliverability status option.

Rank 0-3: 3

Comments:

SCE recognizes that the CAISO recently introduced the idea of partial deliverability, but as witnessed by the March 3 stakeholder meeting, there was substantial confusion and/or difference of opinion between what constitutes "partial deliverability" or "operational deliverability". SCE believes that CAISO needs to better explain what it means by partial deliverability, so that stakeholders can more fully understand and evaluate whether it needs to be addressed in the current round of reforms.

SCE believes that the concept of "operational deliverability" is an important topic that needs to be explored in GIP2, perhaps as part of Topic 8. SCE sees one advantage of an operational deliverability concept related to deliverability study uncertainty. Use of an "operational deliverability" assessment would help address the very real fact that queueorder studies are assumption-driven (i.e. assumptions are made all the time for higher queued projects), but the current "queue order" deliverability study performed in GIP has an "all-or-nothing" definitiveness to it that is not warranted given the assumptions necessarily embedded in GIP. Current deliverability assessment in GIP is "prospective", based on a very uncertain future state of the grid, but it still makes very important decisions based on that assumption. SCE is concerned that this can create uncertainty and risk that deliverability may be a product clearly paid for through GIP but never clearly received as operational realities unfold. As conditions change from those assumed in a GIP study, real-time deliverability status of those generators in queue needs to be reassessed. SCE believes that for operational purposes, deliverability assessments for generation interconnections need to have both a historical component and an operational component. As there a lot riding on the outcome of the deliverability study, it seems that the "one shot" GIP deliverability approach based entirely on one queue-order study needs to be revisited.

One of SCE's procurement practices is to require full deliverability status for all renewable generation entering into any of its renewable procurement programs/solicitations. It is not entirely clear from the Issues ID paper what partial deliverability will mean in conjunction with the CPUC Resource Adequacy rules. Until that is clarified, SCE sees little efficacy in the concept of partial deliverability status.

9. Develop pro forma partial termination provisions to allow an IC to structure its generation project in a sequence of phases.

Rank 0-3: 3

Comments:

Contained under #10.

10. Provide for partial repayment of IC funding of network upgrades upon completion and commercial operation of each phase of a phased project.

Rank 0-3: 3

Comments:

As #9 and #10 are related, SCE will combine the comments for these two sections. As SCE has been party to the LGIAs that have included a partial termination provision for projects that phase their generation development, SCE views resolution of this matter as a high priority and agrees that it should be in scope for this round of reforms. SCE believes that the issue is too important to leave to a future round of reforms, and also is more prevalent with renewable resources, which are the predominant resource in the current cluster studies.

SCE believes it would help the process if CAISO could have a straw proposal by the time of the first work group meeting, perhaps based on the provisions in the two executed LGIAs that had this provision (but not necessarily so) in order to evaluate during the meeting. Absent that, we believe that the stakeholders could easily get sidetracked on this issue, as it is difficult to assess the impact to an LGIA without an example.

11. Applying Section 25 of the tariff to conversions of grandfathered generating units to compliance with ISO tariff.

Rank 0-3: 1

Comments:

No further comments

12. Clarify site exclusivity requirements for projects located on federal lands.

Rank 0-3: 2

Comments:

SCE believes that this issue should not be difficult to reach consensus on. Since the BLM requirement has changed for site exclusivity on BLM-controlled lands, changes to the definition should be considered to add a new requirement in a fashion that is specific to BLM and its requirements. SCE looks forward to the CAISO proposal on this issue.

13. Specify appropriate security posting requirements where the PTO elects to upfront fund network upgrades.

Rank 0-3: 3

Comments:

SCE views this item as high priority because of the important role that PTO upfront financing (on a voluntary basis) has played in the development of transmission for renewable resources in California. In the stakeholder meeting, the CAISO discussed how the one-time waiver of the IFS posting requirements filed in 2009 was a one-time deal, due to the unique circumstances present at that time (in particular, concerns that generators qualify for ARRA and other sources of financing) of the underlying generation projects that were subject to the waiver. Although these unique circumstances have somewhat receded, SCE agrees that this issue belongs in the current round of reforms to address whether or not this waiver provision should be made more permanent.

SCE requests CASIO consideration of another aspect of IFS to be included in the current round of reforms, having to do with the interaction between the IFS, the payment schedule agreed to in the GIA, PTOs invoicing practices, and the PTOs procurement and construction schedule. For example, is the IFS always liquidated to meet the IC's financial obligations under the GIA, or does the IC have the option of providing cash separately to meet those obligations? Another example, if the PTO procurement and construction schedule gets ahead of the payment schedule in the GIA, how does the PTO address this mismatch, by invoicing more, or by liquidating IFS? These are questions SCE is seeking stakeholder input on as it deals with real-world implementation of the GIP reforms.

14. Revise ISO insurance requirements (downward) in the pro forma Large Generation Interconnection Agreement (LGIA) to better reflect ISO's role in and potential impacts on the three-party LGIA.

Rank 0-3: 1

Comments:

SCE understands this insurance concern is primarily the CAISO's concern/issue and has no further comments at this time.

15. Clarify posting requirements for an IC that is already in operation and is applying only to increase its MW capacity.

Rank 0-3: 2

Comments:

Appropriate for either this or future rounds of reform. SCE believes an existing generator should not be exempt from posting requirements for network upgrades, just

because it is already online. As discussed in the CAISO Issues ID paper, the existing generator could still default on its commitments in the LGIA and leave the PTO or other parties potentially required to finance network upgrades relied on by other parties. As a result, SCE believes all required network and distribution upgrades must be securitized.

16. Standardize the use of adjusted versus non-adjusted dollar amounts in LGIAs.

Rank 0-3: 3

Comments:

SCE understands there is confusion on this topic among the CAISO and PTOs, and recommends a "priority" ranking so that all parties can achieve resolution in the current round of the reforms. It makes sense that the PTOs are consistent in their approach to cost estimating and in generating payment schedules in GIAs.

SCE understands that the CAISO is recommending constant (adjusted) dollars for use in interconnection studies, while SCE has suggested that it prefers nominal (non-adjusted) dollars for study results and payment schedules. SCE looks forward to discussing this issue further with the CAISO and other stakeholders.

17. Clarify how GIP applies to storage facilities and behind-the-meter expansion of existing facilities.

Rank 0-3: 3

Comments:

SCE believes that now is an appropriate time to address procedures for storage facilities and behind-the-meter expansion of existing facilities.

SCE has seen few requests for interconnection by these types of facilities, but that could be because of developer's uncertainty about the interconnection procedures. In any event, postponing this discussion for a future round of reforms would not help clear up the current uncertainty, so SCE agrees it should be in scope for the current reform effort.

SCE's position on how to treat storage facilities is currently under evaluation. Storage facilities are unique because that they exhibit characteristics of both generation and load. SCE seeks further clarification of how CAISO understands the implications of classifying a storage resource as load versus generation. SCE sees several jurisdictional and technical questions that should be examined by the CAISO and stakeholders during the GIP2 process regarding energy storage facilities.

18. Conform technical requirements for small and large generators to a single standard, and develop study methodology to determine voltage impacts pursuant to FERC's 2010 order on ISO's proposed new interconnection standards.

Rank 0-3: 3

Comments:

SCE agrees with CAISO that this is a high priority item that needs to be addressed as part of GIP2. It is well understood that inadequate voltage and reactive power support can result in system reliability risks as new generation of all types connect to the system. However, lack of a unified standard regarding voltage requirements, power factor correction, and low voltage ride through has created problems in performing cluster studies to date. SCE believes that the need to conform large and small generators to a single standard is essential in large clustered system analysis.

19. Revisit tariff requirement for off-peak deliverability assessment.

Rank 0-3: 3

Comments:

Depending on the type of the resource and local area conditions, the off-peak condition often can often be found as the worst case scenario to analyzing real system impact. Based on recent experience, most of the significant upgrades triggered in recent cluster studies have been identified as Delivery Network upgrades through the CAISO's Deliverability Assessment which has included on-peak and off-peak analysis as necessary. SCE agrees with the comment raised at the recent stakeholder meeting that the off-peak Deliverability Assessment is one of the few "tools in the toolbelt" to help assess congestion risk for many proposed generation projects. In fact, most areas in SCE system where generation projects have been proposed are areas where the most stressed conditions occur at load levels less than 1-in-5 heat storm condition (i.e. the one worst hour over an average five year timeframe). Therefore, on-peak deliverability is by definition inappropriately optimistic for interconnection study purposes when assessing the impacts of new generation on the system.

If off-peak deliverability is removed entirely from GIP, then SCE believes that this could cause a significant under-estimation of system upgrades identified for and allocated to generation customers under all cluster studies. System upgrade proposals from GIP and the TPP should complement each other; leaving off-peak deliverability not assessed in GIP and waiting for TPP to "fill in the gap" is in SCE's opinion a poor and risky method of assessing the impacts of new generation to the grid.

20. Include operational impacts in assessing generation interconnection impacts.

Rank 0-3: 2

Comments:

Studying system conditions under conservative scenarios in the Interconnection Studies to establish financing responsibility for network and other upgrades is the current purpose of interconnection studies. Operational dispatching and real-time operational impacts require substantial market models which SCE agrees needs to be integrated

with the GIP studies. However, such approved models do not exist currently and are not expected within the timeframe that would support inclusion in GIP2. SCE agrees that another initiative like RIMPR-2 may be the more appropriate avenue to consider these issues at this time.

21. Revise provisions for transferring queue position to a new IC.

Rank 0-3: 0

Comments:

SCE agrees that this issue should not be part of the current round of reforms. SCE believes the allowing an entity to assume the queue position of a withdrawn project is fraught with uncertainty, and appears to be highly prone to arguments of undue discrimination. Queue positions are not "property" and should not be allowed to be bought, sold, or transferred to another party, regardless of whether the other party is willing to accept all current study results and financial security requirements.

Other Comments:

- Are the five workgroups and their topic areas organized properly?
- Are there other topics that you believe should be considered for the scope of GIP 2? See introductory comments.
- 3. If you have other comments, please provide them here. See introductory comments.