

Stakeholder Comments Template

Subject: Generation Interconnection Procedures Phase 2 (“GIP 2”)

Submitted by	Company	Date Submitted
<p><i>Brian Rahman on behalf of Pio Pico Energy Center,</i> Brian@zglobal.biz</p> <p><i>604 Sutter Street, Suite 250 Folsom, CA 95630</i></p> <p><i>916-985-9461</i></p>	<p><i>ZGlobal Inc. on behalf of Pio Pico Energy Center</i></p>	<p><i>March 11, 2011</i></p>

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 no later than the close of business on March 10, 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.

Comments on 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: A fair economic test is in order, the details of which should be vetted out within the process. As there are many complexities with the “real” association of economic costs and benefits with any particular project, the timing of an economic test and its application for determining IC reimbursement level versus assigned cost responsibility would be critical within the GIP process. Also, a project’s potential for being financially impacted by a Cluster group of upgrades assigned to it by its pure association within the Cluster and not necessarily because of its own direct impact on network upgrade or transmission costs effectively can place the project in a low probable position of securing a PPA where transmission cost ranking is a weighted factor. Significant involvement and coordination with LSE procurement would seem to be necessary.

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: **2**

Comments: For upgrades taken on as CAISO/PTO system “planned” upgrades, especially if modified from GIP study findings should result in effectively lowering the IC’s upfront cost responsibility as the upgrades now become a transmission planning upgrade within the overall system.

Believe there should be much more transparency and awareness made with regard to how the CAISO/PTO collaborate and coordinate the GIP study results (or rather the actual study process) with the efforts conducted and published by the CEC’s RETI and the CTPG statewide planning processes.

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

Rank 0-3: **2**

Comments: If by “transparency” there is a greater level of granularity, especially in the lower voltages (*i.e.* 66 kV SCE system), displayed in the per unit cost details provided by the utilities, then definitely YES. Studies provided to date are very weak on providing details behind the cost estimates provided. The per unit costs provided are very high level, nothing is provided for the 66/70 kV system estimates – of which there are many interconnection request to – leaving the IC with little knowledge or understanding of the details.

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: **2**

Comments: Presumption here is that you are speaking of WDATs – need to clarify. There are other “bubbles” within the BA (Bear Valley as an example) which could be what is being referred to here.

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

Rank 0-3:

Comments:

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

Rank 0-3: **3**

Comments: A clear and common set of terms is a must. A flag or marker in the ground could constitute start of construction and obligate an IC to put up significant security and wait many years for reimbursement based on the COD and completion of all network upgrades. Under the older LGIA (pre-GIPR/Cluster), there was a schedule of payments made that were tied to the construction milestones of the PTO’s work. This would seem to be a very easy thing to return to – as far as the 100% posting option for construction is concerned.

7. Clarify ISO information provision to assist ICs.

Rank 0-3: **3**

Comments: What is very important here is not just the timeliness, but clear notation of exactly what is posted. There are a significant number of base cases posted with little to no description, comments or notation of their variances, mitigations, inclusions, deletions, assumptions, operating notes, etc. Communications with ISO staff provides very little assistance as the response quite often is “...we’re not sure”. The base cases take a considerable amount of work to “tune” them up in order to come up with reasonably close outcomes as provided by the PTOs’ and CAISO study results.

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

Rank 0-3:

Comments:

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: LGIAs should allow for a structure that establishes a phasing of a project and therefore the partial termination as well. Additionally, where projects (especially wind and solar projects) break down these phases, even in a post study period, an ability to parse the LGIA (for lack of a better description) for the inevitable sale and ownership changes of the constituent phases should be addressed.

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: Commercial Operation Date should not be limited by the completion of all network upgrades.

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

Rank 0-3:

Comments:

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

Rank 0-3:

Comments:

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

Rank 0-3:

Comments:

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:

Comments:

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

Rank 0-3:

Comments:

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

Rank 0-3:

Comments:

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

Rank 0-3:

Comments:

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:

Comments:

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

Rank 0-3: **3**

Comments:

20. Include operational impacts in assessing generation interconnection impacts.

Rank 0-3:

Comments:

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

Rank 0-3: **3**

Comments:

Other Comments:

1. Are the five workgroups and their topic areas organized properly?
2. Are there other topics that you believe should be considered for the scope of GIP 2?

Yes, as the CAISO works toward defining the universe of discourse with regard to Scope and Issues to be covered in the Generation Interconnection Procedures - Revision effort number 2 – the following additional comments are provided.

The following two items are suggested for inclusion in the scope of GIP2.

1. Viability Criteria Requirement Prior to Inclusion in Cluster Study

Issue: The current cluster study assumptions include projects with little objective demonstration of progress towards completion. This has resulted in unnecessary allocation of costs due to network upgrades that are not proven to be needed. It makes no sense to build unnecessary network upgrades for projects that are not making real progress towards completion.

Observations:

- Active Serial projects still in IA negotiations for extended periods (e.g., period of years).
 - Note: According to the CAISO Interconnection Queue, there are 75 Active Serial projects with approximately 29 (> 38%) still awaiting execution of an LGIA. Age of some of these projects is greater than 7 years in the queue – yet still waiting to even execute an LGIA following completed studies.
- Active Serial projects with executed IAs not starting construction.
- Few projects with executed PPA's.
- Few projects submitting AFCs to the California Energy Commission

Proposed Modification:

Utilize a set of typical objective milestone points in the development process of a power project before allowing the project to be included in a Phase II study in the cluster impact study process. Remove earlier-queued projects from the generation in the Phase II model if the projects have not met the objective milestones demonstrating real progress towards completion. For example, include objective criteria in addition to the existing criteria in the GIP applications process, beyond simply a financial investment, that must be passed prior to being included in a Phase II cluster study. Inability to demonstrate progress by meeting the “criteria” would result in a slip of the project to the very next Phase II cluster study, but remain in the queue. Examples of additional objective criteria could include:

1. Signed long-term PPA;
2. Ordering of Major Equipment such as Inverters, Panels, Wind Turbines, Generators, etc.;
3. AFC Submitted to the California Energy Commission;
4. EIR complete;
5. Other objective criteria demonstrating real progress towards completion.

2. Separation of Local Capacity Area (LCA) located generation from balance of cluster participants due to demonstrated need for reliability and operational benefits.

Issue: Large, reliability based projects located within LCA’s are experiencing an unjust allocation of estimated upgrade costs. True, cost assignment based on need, is not occurring. This results in sending wrong price signal for true cost of development. There should not be any cost socialization that overly benefits one technology over another.

Comments:

The need for clustering of transmission studies was clearly driven by the CA RPS and the subsequent renewable generation boom. However, as most processes evolve, there will undoubtedly be some unintended consequences. For example, consider a large rotating generator (providing RA, regulation and operating reserves, LCR, etc.) responding to both market price observations and reliability needs within an LCA. Such a generating facility may even have a PPA with the local utility for which it will serve local system reliability needs.

This reliability-needed project may be doomed, however, because it is on an uneven playing field when included in the cluster study process with projects seeking to “wheel-through” the given utility. These typically remotely-located transmission constrained projects are the projects actually driving the need for massive backbone transmission upgrades, not the local reliability project within the LCA. There are other existing options for these location-constrained projects to obtain needed transmission and related upgrades and to have the proper cost allocations within the CAISO process. For

example, an LCRIF (Location Constrained Resource Interconnection Facility) was used in the TRTP.

The underlying cost allocation data from past Cluster studies, will show that under the currently existing cluster study process, the reliability-needed local LCA project in the example above is allocated 50% of the cluster's deliverability network upgrades, even though the network upgrades are required to serve the needs of remote RPS driven resources. There is a difference of 4 times in these allocations, with the majority of RPS projects receiving less than 12% to 14% of the cost share.

Proposed Modification:

Include reliability-needed LCA located generation in a separate cluster study and only assess the incremental impacts of these projects. Allow the existing price signals and public data, to perform as intended. Use existing CAISO mechanisms to be used within the LCA cluster so that cost assignments are done accurately. Assign costs based on demonstrated purpose and need.

3. If you have other comments, please provide them here.