

Stakeholder Comments Template

Submitted by	Company	Date Submitted
Justin Bieber jtby@pge.com ; 415-973-7205	Pacific Gas and Electric Company	April 10, 2015

Please use this template to provide your comments on the 2015 Interconnection Process Enhancements (IPE) Issue Paper/Straw Proposal for Topics 1- 11 that was posted on March 23, 2015 and as supplemented by the presentation and discussion during the March 30, 2015 stakeholder meeting.

Submit comments to initiativeComments@caiso.com

Comments are due April 10, 2015 by 5:00pm

The Issue Paper/Straw Proposal for Topics 1- 11 that was posted on March 23, 2015 may be found at:

http://www.caiso.com/Documents/IssuePaper-StrawProposal_InterconnectionProcessEnhancements2015.pdf

The presentation for the March 30, 2015 stakeholder meeting is available on the ISO website at: http://www.caiso.com/Documents/Agenda-Presentation-InterconnectionProcessEnhancements2015_IssuePaper-StrawProposal.pdf

For each topic, please select one of the following options to indicate your organization's overall level of support for the CAISO's proposal:

1. Fully support;
2. Support with qualification; or,
3. Oppose.

If you choose (1) please provide reasons for your support. If you choose (2) please describe your qualifications or specific modifications that would allow you to fully support the proposal. If you choose (3) please explain why you oppose the proposal.

Topic 1 – Affected Systems

PG&E supports the straw proposal on this topic with qualification.

The CAISO's straw proposal would establish a process under the CAISO tariff to incorporate potentially Affected Systems into the interconnection process and establish a deadline, within 30 calendar days of notice by the CAISO to a potentially Affected System, by which the Affected System would need to advise the CAISO in writing if it is in fact an Affected System. If a potentially Affected System determines that is actually an Affected System after this deadline, than according to the CAISO tariff, the Affected System, not the CAISO, IC, or the PTO will be responsible for any necessary mitigations.

PG&E supports the CAISO's efforts to incorporate potentially Affected Systems into the interconnection process and to establish requirements and obligations for potentially Affected Systems to participate. However, this will not be effective unless the CAISO establishes sufficient reciprocity agreements or other appropriate governing documents and a dispute resolution process with the potentially Affected Systems. Since the potentially Affected Systems are not under the jurisdiction of the CAISO tariff, the current proposed change to the CAISO tariff by itself would not be sufficient to establish such obligations. This inconsistency must be addressed before any similar proposed tariff change can go into effect. It would create significant contractual and other problems if there is no clear responsible party for mitigations on an Affected System.

Furthermore, PG&E would suggest that the deadline for potentially Affected Systems to identify as actually being affected be re-examined and perhaps extended to 60-90 days to allow sufficient time for study evaluation by Potentially Affected Systems. The CAISO should also establish a standard requirement for technical studies and other documentation to support the need for any required mitigations to Affected Systems. This could help ensure fair and equitable responsibility by the appropriate generating parties for any potential mitigation to an Affected System. This standard should also be included in the corresponding reciprocal agreements with potentially Affected Systems.

Topic 2 – Time-In-Queue Limitations

PG&E fully supports this proposed change.

To support viable Generating Facilities in the Generator Interconnection Queue and avoid unnecessary network upgrades, if an Interconnection Customer needs to extend its COD

beyond the 7/10 year timeframe, due to circumstances outside of its control, the CAISO will require that a Generating Facility meets and maintains certain commercial viability criteria in order maintain its deliverability status.

This change would reduce the likelihood that transmission will be overbuilt, at CAISO customer expense, by building unnecessary transmission to establish deliverability for non-viable projects. PG&E would like to emphasize that effective queue management must also be employed to ensure that non-viable projects that don't meet all contractual obligations should not be allowed to remain in the queue at all past the 7/10 year timeline. This proposed change reduces some of the negative impacts on the rest of the queue from non-viable projects but does not eliminate those impacts. Plan of service upgrades and other reliability upgrades needed for non-viable projects to achieve COD as an EO facility also impact the study assumptions and constructability of upgrades for other queued projects.

Topic 3– Negotiation of Generator Interconnection Agreements

PG&E opposes the aspect of this proposal that delays the tendering date of a Generator Interconnection Agreement (GIA). PG&E supports the proposal to add tariff language that clarifies that the CAISO or the PTO may declare that GIA negotiations are at an impasse. PG&E also supports the proposal to hold ICs responsible for extending the In-Service and Commercial Operation Dates.

PG&E believes that the intent of the first part of this proposal to delay the tendering of the GIA until the latest date necessary is to avoid churn and extended negotiations when an IC is not yet ready to move forward with its project. However, there is already an option under the current GIDAP process that allows an IC to “park” its Interconnection Request for one year and effectively delay the start of GIA negotiations. If an Interconnection Customer (IC) has a late COD that allows for substantial float in the schedule for the PTO to complete work on Interconnection Facilities and Network Upgrades, and the start of engineering and pre-construction activities can be delayed without impacting other projects in the queue, then those terms can be included into a GIA without the need to delay tendering and negotiations. Adding additional flexibility in the negotiation timeline is unnecessary and makes effective queue management more difficult. Also, many viable projects need to show an executed GIA to prove progress and viability before getting financed, so it is beneficial for all parties involved to begin GIA negotiations quickly.

There are also a few problems with this approach to delay the tendering of the GIA. Often times, GIAs take substantially longer than the 120 day timeframe to negotiate, so waiting until the latest date possible to tender the GIA may lead to further delays. There are also shared

Network Upgrades with other Generating Facilities which would complicate the determination of the GIA tendering time frame. And, Generating Facilities from prior or subsequent queue clusters can be impacted by the network upgrades of a given generator and some of those interdependencies are not easily discerned without substantial engineering or until future queue cluster studies and reassessments are performed. PTOs need an executed GIA in order to deploy the necessary resources to manage and evaluate interconnection projects and the associated Network Upgrades to prevent any impacts to other interconnection projects in the queue. If this proposal were implemented, at a minimum, the CAISO tariff should be changed to explicitly allow the PTO to invoice the IC for its share of costs incurred on Network Upgrades before the GIA is executed. This is critical when the PTO needs to begin work on shared or dependent Network Upgrades to accommodate the timelines of other ICs before all of the GIAs are executed for all of the ICs sharing network upgrade responsibility.

PG&E believes that it is beneficial to clarify that the PTOs and the CAISO can declare negotiations at an impasse. This will prevent wasted time and expense from negotiating GIAs when parties cannot agree and provide a path forward for interconnection. It would be helpful to add some guidelines to the Generator Management BPM for dispute resolution to move forward with interconnection projects that may get filed unexecuted due to the inability to successfully negotiate terms.

PG&E also supports the proposal to hold ICs responsible for extending ISDs and CODs as necessary. This will help maintain effective queue management and avoid unnecessary delays that could impact other projects in the queue.

Topic 4 -Deposits

Interconnection Request Study Deposits

PG&E supports this proposal to increase the Interconnection Request (IR) study deposits for both small and large generators with the qualification that the increase should correspond with the actual costs of performing the studies. Based on the information that the CAISO provided in this initiative, the average study cost for Cluster 5 projects was \$156,500 and the range was \$57,265 - \$242,266. Since deposit amounts are refunded based on the actual costs of performing the study, PG&E believes that it makes sense to increase the IR study deposit to cover the high end of this range. This will provide a realistic signal about the potential cost for the interconnection studies and avoid the need to collect substantial funds after the fact from ICs, some of whom may be withdrawn, for actual costs that would exceed the lower study deposit amount. Based on this logic, PG&E suggests an IR Study Deposit amount of \$250,000.

Limited Operation Study Deposit

PG&E supports this proposal to clarify the Limited Operation Study deposits.

Modification Deposits

PG&E supports this proposal to clarify the Modification deposits.

Repowering Deposits

PG&E supports this proposal to clarify the Repowering deposits.

Topic 5 - Stand-Alone Network Upgrades and Self-Build Option

PG&E supports this proposal to clarify how the financial security obligations impacted when an IC invokes the right to self-build a Stand Alone Network Upgrade with a qualification over the treatment of financial security in the case of a project withdrawal.

PG&E believes that this proposal that would allow a project in the queue to reduce its financial security obligations can create a potential loophole that would incentivize a non-viable project to remain in the queue because it has the ability to exercise that option and reduce its financial security obligations prior to withdrawal. This reduces the financial liability for an IC that would result from a potential project withdrawal. This result would conflict with effective queue management and create potential adverse impacts for other viable projects in the queue.

The CAISO's proposal does include language (below) addressing the amount of financial security that would be returned to the IC after a withdrawal. The CAISO's proposed change attempts to avoid a loophole by requiring that any avoided posting amount (due to self-build reductions) should be forfeit and therefore used to offset the costs of the TAC. However, there is a likely outcome, according to this proposal, that the financial security could have been adjusted/reduced due to the self-build option to a substantially lower amount that would no longer be sufficient to cover the amount needed to cover irrevocable costs or the intended withdrawal forfeiture.

Here is an example: Project A has a \$20M estimate for Reliability Network Upgrades (RNU) to interconnect; \$16M for a switching station that it elects to self-build and \$4M for other reliability and protection facilities. The 1st financial security posting would be 15%* \$20M = \$3M (assuming estimates haven't change between Phase I to Phase II, in theory this is conservative since projects withdraw between Phase I and II reducing the required network upgrades). Without the self-build option, the 2nd financial security posting amount would be 30% * \$20M = \$6M. If the financial security is reduced to only cover the RNUs being built by

the PTO, it would be $30\% * \$4M = \$1.2M$. Project A could then withdraw with a substantially lower forfeiture penalty than it would have incurred otherwise. There would not be enough financial security on hand to cover the forfeiture from the avoided posting amount.

In this case, a non-viable project may be incentivized to remain in the queue because it can actually reduce its liability or penalty for doing so by invoking the self-build option at a later time. PG&E suggests that in order to close this loophole, there be a limit to any financial security reductions due to the self-build option. The financial security should never be adjusted below the 1st financial security posting amount. This would still allow for reasonable financial security requirements while reducing (but not completely eliminating) the incentive for a non-viable project to remain in the queue only to reduce its forfeiture penalty at a later time.

The following are Straw Proposal edits for Section 11.4.2.1 (a) and 11.4.2.2 (a) of Appendix DD:

- a) the Interconnection Financial Security plus (any other provided security plus any separately provided capital) less (all costs and expenses incurred or irrevocably committed to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer, and any postings avoided due to Interconnection Customer's election to self build Stand Alone Network Upgrades.), or

Topic 6 - Allowable Modifications Between Phase I and Phase II Study Results

PG&E supports this proposal to add the In-Service, Trial Operation, and Commercial Operation dates and Point of Interconnection to the list of specific allowable modifications to an IC's project from the time the Phase I study report is issued until 10 Business Days following the Phase I Study results meeting.

Topic 7 – Conditions for Issuance of Study Reports

PG&E supports this proposal with qualification.

If a modification is requested between the Phase I and Phase II studies, there should be a timeline that it needs to be formally requested within 15 days after the Phase I Results Meeting. This is critical to ensure there is sufficient time to evaluate and potentially approve modifications that are not material before the assumptions are set to begin the Phase II study. Otherwise, there could be potential study delays for all projects in the given queue cluster.

The current Reassessment process only evaluates whether or not deliverability/capacity network upgrades are still needed after considering any project withdrawals that occurred during the year. The Reassessment process should also assess changes to the plan of service

upgrades for projects as well. Even project withdrawals of small projects can have substantial changes on the upgrades needed to interconnect other projects in the queue.

For example, assume project A is in an earlier queue cluster than project B and C. Projects A and B are interconnecting at a new switching station that was originally identified as being required to interconnect project A (in the earlier queue cluster study). In the subsequent queue cluster study, additional breakers and other expanded scope at the switching station are identified to interconnect project B, with protection relays to the Point of Interconnection for project C. If project A withdraws during the year, the scope of that switching station needed to interconnect project B will change. If both projects A and B withdraw, then the switching station will no longer be required at all, and the protection requirements for project C will change. Changes such as these that can impact multiple projects need to be evaluated collectively during the annual Reassessment and included in the annual Reassessment reports.

Topic 8 - Generator Interconnection Agreement Insurance

PG&E supports these proposed changes.

Topic 9 - Interconnection Financial Security

Process Clarifications

PG&E supports this proposed clarification.

Posting Clarification

PG&E supports this proposed clarification that a financial security posting can be made at any time before the deadline. However, it should be noted that a non-viable project may be able to make a project change that would reduce its financial security obligations before a withdrawal while avoiding other obligations that would occur after withdrawal but before the next financial posting.

For example, a non-viable project A can remain in the queue until the reassessment is complete. Then, if it does not like the results of the reassessments, it can reduce its financial obligations by electing to self-build upgrades or downsizing in the next window. It can then immediately lower/true-up its financial security by making the 3rd financial security posting early, before the start of Construction Activities, and then withdraw with a reduced penalty. In this case the project reduces its forfeiture before withdrawal

and potentially avoids paying for its share of PTO incurred costs on shared Network Upgrades that would have been incurred on pre-construction activities.

Topic 10 - Forfeiture of Funds for Withdrawal During Downsizing Process

PG&E supports this proposal with qualification.

Due to some ambiguity, the Downsizing tariff language may lead ICs to believe that financial obligations may be reduced at the expense of other parties by entering the downsizing process and subsequently withdrawing the corresponding interconnection request. The CAISO's and FERC's intent for downsizing generation to hold harmless other non-downsizing generation is clearly established in FERC's acceptance of CAISO's downsizing tariff amendment as reflected in paragraph 32 of [Docket No. ER14-2063](#).

The CAISO should enhance the existing tariff language to clearly represent the financial obligations of a downsizing generator. The downsizing language should be clarified to emphasize:

1. That the downsizing study concludes with the completion of the reassessment,
2. the network upgrade cost responsibility and forfeiture obligation limit established by Section 11.4.2.1 and 11.4.2.2 of Appendix DD only reduce as Network Upgrades are removed from the reassessment (the potential \$10k per MW limit forfeiture cap is based on pre-downsizing approved generator output),
3. a withdrawing generator is obligated to cover all irrevocably incurred cost to eliminate impact on the interconnecting PTO or other generation resulting from their downsizing and subsequent withdrawal.

From the current CAISO tariff: Appendix DD, Section 11.4.2.1 and 11.4.2.2

b. the Interconnection Financial Security plus (any other provided security plus any separately provided capital) minus the lesser of fifty (50) percent of the value of the posted Interconnection Financial Security for Network Upgrades or \$10,000 per requested and approved megawatt of the Generating Facility Capacity at the time of withdrawal.

For example, project A is 50 MW, with estimated network upgrades cost of \$20M. It made a 1st financial posting of 15% * \$20M = \$3M and 2nd financial security posting of 30% * \$20M = \$6M. These forfeited funds would ultimately offset the TAC and costs for CAISO customers as well as reduce the cost responsibility for some other ICs in the same queue cluster for the remaining network upgrades. For this example, if project A downsizes to 1 MW and completes the

downsizing process through the annual reassessment, the estimated network upgrades cost might be reduced to \$5M (many of the reliability requirements are not eliminated due to the decrease in capacity and some delivery upgrades could still be needed). If project A withdraws immediately after the downsizing, it can true-up its financial security at the next posting to $30\% * \$5M = \$1.5M$ (which according to the proposal in topic 9 can occur immediately). If the project withdraws immediately after it completes the downsizing and financial posting adjustment, and can show good faith effort to obtain financing, then in addition to any potential irrevocably incurred costs by the PTO in its behalf, it will forfeit the lesser of 1) half of the recently reduced financial security amount of \$1.5M or \$750,000, or 2) the forfeiture cap of $\$10,000/MW * 50 MW = \$500,000$.

The forfeiture cap of \$10,000/MW does not apply do the downsizing capacity of 1 MW and does not reduce the forfeiture to \$10,000. To do so would cause harm to other generators in the queue and CAISO customers in multiple ways, only some of which are described here. Other generators in the same queue cluster would be allocated project A's responsibility for the remaining shared network upgrades, without the benefit of offsetting a portion of those costs with the forfeiture from project A. This will result in increased financial security and funding requirements, and even potentially reduce reimbursement after COD for upgrade costs classified as RNUs because RNU reimbursement is limited to \$60,000/MW under the GIDAP. It would harm all projects in the queue because it incentivized a non-viable project to remain the queue and cause impacts to all of the interconnection study assumptions and results that were done assuming this project was in the queue. It would also adversely impact CAISO customers because the forfeiture funds would otherwise be used to offset the TAC.

The straw proposal needs to be enhanced to clarify the principles described above to clarify the process and make clear that the downsizing process cannot be used to absolve an IC of its financial obligations at the expense of other parties.

Topic 11 –TP Deliverability Option B Clarifications

PG&E supports this proposed clarification.