Stakeholder Comments Template

Submitted by	Company	Date Submitted
Fernando E. Cornejo fernando.cornejo@sce.com	Southern California Edison	June 8, 2018

Please use this template to provide your written comments on the 2018 IPE stakeholder initiative Straw Proposal posted on May 9, 2018.

Submit comments to InitiativeComments@CAISO.com

Comments are due June 8, 2018 by 5:00pm

The straw proposal posted on May 9, 2018 and the presentation discussed during the May 21, 2017 stakeholder meeting can be found on the CAISO webpage at the following link: http://www.caiso.com/informed/Pages/StakeholderProcesses/InterconnectionProcessEnhancements.aspx

Please use this template to provide your written comments on the Issue Paper topics listed below and any additional comments you wish to provide. The numbering is based on the sections in the Issue Paper for convenience.

4. Deliverability

4.1 Transmission Plan Deliverability Allocation

CAISO proposes to implement a new TPD Allocation process based on a resource's status in the interconnection process as well as progress towards achieving commercial operation. SCE agrees with the CAISO that any revisions to the allocation of deliverability limit the risk to the PTOs, consistent with the CAISO's 2017 IPE initiative to add a second opportunity for generators to "park" without increasing the very real risk that either later clustered projects or the PTO become required to finance an upgrade as a result of the parked project's delay, and ensure the most viable projects proceed appropriately. Maintaining such a focus on limiting the risk to the PTOs, while affording greater opportunity for

CAISO/ICM 1 May 21, 2018

projects that have an executed or regulator-approved PPA to obtain Transmission Plan Deliverability, SCE believes the CAISO's proposal to be reasonable. As part of the proposed modified process which entails allocation priority groups based on a project's interconnection process status as well as its commercial status, projects will have greater opportunities to participate in the TPD allocation process. Consistent with current GIDAP provisions, all generators that receive an allocation should continue to be required to meet the retention criteria, as demonstrated through an affidavit.

4.2 Balance Sheet Financing

SCE supports providing projects means, beyond an executed or regulator-approved PPA, for demonstrating their commercial viability. While the CAISO proposes to eliminate the ability of a generator to rely on Balance Sheet Financing (BSF) as part of the commercial viability process, the CAISO's proposal does allow a resource developer to demonstrate its viability absent a PPA.

4.3 Participating in the Annual Full Capacity Deliverability Option

SCE supports the CAISO's proposal to have Groups four, five, six, and seven in the TPD Allocation sequencing to replace the current Annual Full Capacity (AFC) deliverability option. This process will serve as an alternative to energy-only projects requesting to reenter the queue to seek TPD. To eliminate the potential for gaming and so that there will be greater equity between the two options for a resource to be allocated deliverability, the same TPD retention criteria requirements must be in effect whether a resource obtains its deliverability through the AFC process or the TPD allocation process.

4.4 Change in Deliverability Status to Energy Only

SCE does not support the CAISO considering additional opportunities for projects to convert to energy only deliverability status beyond the currently allowed between Phase I and Phase II studies, and after the allocation of deliverability. Allowing for additional opportunities for generators to convert to Energy Only status exacerbates the uncertainty of the results from technical studies as well as increases cost responsibility risks to PTOs. With the CAISO's proposal to allow projects to convert to Energy Only status at any time after the Phase II studies, the costs risk exposure to the PTOs will be magnified particulary once a Generator Interconnection Agreement is executed. As a mitigating measure to this outcome, if the CAISO moves forward, SCE supports the CAISO proposal that projects that change to energy only deliverability status as a result of failure to meet commercial viability or TPD retention criteria will retain the cost responsibility for all Deliverability Network Upgrades (DNUs) if the DNUs are still required in support of queued generation projects.

4.5 Energy Only Projects' Ability to Re-enter the CAISO Queue for Full Capacity

SCE is not opposed to allowing existing, currently operating, Energy Only projects opportunities to reenter the queue in order to seek deliverability if such existing projects cannot obtain deliverability through other deliverability options that may be available. If this option is to be allowed, then the interconnection customer should bear the allocated cost responsibility of any needed Deliverability Upgrades.

CAISO/ICM 2 May 21, 2018

4.6 Options to Transfer Deliverability

No comment.

5. Energy Storage

5.2 Replacing Entire Existing Generator Facilities with Storage

No comment.

6. Generator Interconnection Agreements

6.1 Suspension Notice

SCE supports the CAISO's proposal to modify Article 5.16 – Suspension of the GIA to require the Interconnection Customer to include a proposed start and end date of the suspension in its suspension request (with the caveat that the end date be no more than three years from the originally proposed COD as is currently the case in the pro-forma LGIA or three years from the date the suspension request is submitted, whichever is earlier). The CAISO should also have the authority to approve the suspension, with concurrence from the PTO, by ensuring the project is in good standing and in determining how the milestones set forth in the GIA and later queued customers may be impacted during the suspension period. To address the potential of projects lingering without making an earnest effort to move towards achieving commercial operation or adversely impact queued behind projects, SCE also supports the proposed GIA modification to include language requiring the interconnection customer to negotiate in good-faith to expeditiously revise the milestone dates (at the end of the suspension period).

6.2 Affected Participating Transmission Owner

SCE supports providing developers greater cost certainty through the CAISO's proposal to modify the tariff to allow a separate maximum cost responsibility for each PTO. The maximum cost responsibility for each PTO will be documented in the interconnection studies and the GIA or affected PTO upgrade facilities agreement as appropriate. It would then be appropriate for interconnection customers to post interconnection financial security to each PTO separately.

SCE supports the CAISO not proposing to further discuss any potential for a four-part agreement with Affected PTOs. It is more appropriate, and more manageable, to have the continued use of separate agreements in order to properly identify the requisite terms and conditions among only the parties involved.

6.3 Clarify New Resource Interconnection Requirements

No comment.

6.4 Ride-through Requirements for Inverter based Generation

SCE supports the CAISO addressing voltage and frequency ride-through requirements, including the requirement to continue to inject current during system fault conditions that are cleared within a prescribed time period (i.e., cycles needed for system protection to clear faulted facilities). SCE agrees with the CAISO that tripping should be based on physical equipment limitations to protect the inverter

itself, and not a generic NERC standard which is less stringent. Minimum technical standards for return times following transient voltage deviations and post inverter trip return time are also appropriate to stabilize the grid following a disturbance and to not jeopardize the reliability of the network.

7. Interconnection Financial Security and Cost Responsibility

7.1 Maximum Cost Responsibility for NUs and Potential NUs

SCE supports the CAISO's proposal to continue the inclusion of Potential NU costs when determining the IC's maximum cost responsibility (with corresponding setting of cost caps) as identified in the interconnection studies. SCE feels that the ISO's position is appropriate and prevents shifting the financial responsibility of these Potential NUs to PTOs that would otherwise be assigned to later-queued projects, where the earlier-queued projects that were assigned those Potential NUs withdraw prior to executing a GIA. SCE strongly opposes the LSA, EDF and SPower proposed alternative to initially exclude the cost of Potential NUs from the maximum cost responsibility. To delay the raising of a [single non-withdrawn] interconnection customer's maximum cost responsibility until the other interconnection customers responsible for funding the network upgrade withdraw without signing a GIA, would, on an interim basis, inappropriately underestimate an interconnection customer's true maximum cost responsibility. Moreover, as there is no requirement for ICs to post Interconnection Financial Security for Potential NUs, there should be limited push-back from IC's to include the cost of Potential NUs in the maximum cost responsibility. This item is also included in scope for the Order 845 compliance filing.

Furthermore, it is SCE's position that a 100% share of certain shared Reliability Network Upgrades (RNUs which SCE labels "plan of service" RNUs in interconnection studies, such as a line position at the Point of Interconnection to terminate an IC-owned generation tie line that is shared by more than one entity) should be included in the Potential NU costs for each of the participants in the shared gen-tie, for purposes of determining each of the sharing Interconnection Customer's maximum cost responsibility. [SCE uses the term "plan of service" RNU, which "but-for" the interconnection request, would not be constructed. Even though "plan of service" RNU is not a defined term, it is a useful term of art that the ISO is familiar with.] However, these same shared plan of service RNUs should be treated differently versus other RNUs as pertaining to the provisions of Section 14.2.2 and the backstop financing responsibility of PTOs in that Section. The Participating TO must not be exposed to additional financing risk just because it allowed multiple Interconnection Customer's to share a plan of service RNU that serves no other purpose than to terminate an IC -owned generation tie line. SCE believes that shared plan of service RNU was never contemplated at the time of establishment of Section 14.2.2 and is not consistent with the intended purpose of Section 14.2.2 of the GIDAP. The backstop financing risk associated with the potential re-allocation of costs associated with a plan of service RNU must be appropriately placed upon those remaining IC's that, absent the sharing of the RNU, would otherwise be required to construct individual generation tie lines and solely pay for the associated plan of service RNU. ICs often request to share gen-tie facilities for financial, physical (ingress/egress into substations), and environmental permitting reasons. If PTOs are not allowed to reallocate any remaining plan of service RNU (due to the effects of Section 14.2.2), and would then be

CAISO/ICM 4 May 21, 2018

required to backstop finance facilities that by their nature provide no network benefits, the PTO may no longer agree to allow ICs to share plan of service RNUs, an undesirable outcome for Interconnection Customers and the environment.

7.5 Shared SANU and SANU Posting Criteria Issues

Given an SANU is typically needed by a single or limited number of interconnection customer(s) the GIDAP BPM requirement that any project assigned a SANU must post for 100% of the associated costs should remain intact. If multiple interconnection customers share a SANU, they each should continue to be required to post 100% of the costs. Changing the current CAISO policy to allow each project assigned a SANU to post less than 100% of the costs would unreasonably transfer financial risk to the PTO if projects with a shared SANU withdraw, but the SANU is still needed. As the CAISO points out in the Straw Proposal, splitting the cost responsibility for a SANU would unnecessarily put the PTO at risk if a project sharing the SANU withdraws. SCE agrees with the CAISO's proposal to allow PTOs to make the shared SANU posting determination on a case by case basis or to establish criteria for SANU cost allocation.

7.6 Clarification on Posting Requirements for PTOs – Final Proposal

7.7 Reliability Network Upgrade Reimbursement Cap

SCE is pleased to see the CAISO considers SCE's solution "to be simple to implement and would be appropriate". SCE's solution would be if the upgrade(s) assigned to a withdrawing generator are determined to still be needed by later-queued projects, the interconnecting PTO's "backstop" obligations to these later-queued projects should be limited to the maximum cost reimbursement identified for the earlier-queued projects and the queued-behind projects should bear the cost associated with amounts that are in excess of the maximum reimbursement amount. This solution would ensure that ratepayers do not get the burden of the amount over \$60k/MW cap, and interconnection customers in later clusters that locate their project in an area that triggers high cost RNUs are exposed to the potential cost implications of that choice.

7.9 Impact of Modifications on Initial Financial Security Posting

SCE does not oppose the CAISO's proposal regarding modifications of the initial financial security posting if it can be **definitively** determined that a required upgrade in an interconnection customer's Phase I study report is no longer needed due to the withdrawal or changes to earlier queued projects or other system changes, and that determination is made in advance of the initial IFS posting due date. In such instances, the interconnection customer should not be required to post IFS for that upgrade. SCE believes the challenge of such proposal is relying on "engineering judgment" to reach such a "no longer needed" determination, which can be very contentious, to say the least, between developers and PTOs.

CAISO/ICM 5 May 21, 2018

8. Interconnection Request

8.1 Study Agreement – Final Proposal

No comment.

8.4 Project Name Publication

No comment.

9. Modifications

9.1 Timing of Technology Changes

With the CAISO's clarification that it intended to propose a complete prohibition, and did not mean to suggest a temporary suspension, by use of the term "moratorium", SCE supports the CAISO's proposal to create an absolute prohibition on technology changes that change the project fuel type for interconnection customers that have (or are requesting) a commercial operation date beyond the 7/10 year threshold anticipated by the CAISO tariff.

9.2 Commercial Viability – PPA Path Clarification

No comment.

9.3 PPA Transparency – Final Proposal

No comment.

9.4 Increase Repowering and Serial Re-Study Deposit— Final Proposal

No comment

9.5 Clarify Measure for Modifications After COD – Final Proposal

No comment.

9.6 Short Circuit Duty Contribution Criteria for Repower Projects

SCE supports modifying short circuit duty (SCD) criteria for repower projects to align with the criteria used in performing a material modification evaluation for projects that have yet been constructed. Such modification to the criteria will ensure that both repower requests and material modification requests be evaluated in a consistent manner.

10. Additional Comments

As stated in SCE's comments on the Issue Paper in response to the topic "7.3 - Financial Security Postings and Non-Refundable Amounts" (withdrawn from the Straw Proposal), PTOs must be made financially whole in situations where upgrades that are no longer deemed needed due to reassessment but where the PTO has already incurred costs or irrevocably committed funds to the project. There needs to be a change to the CAISO tariff such that the transmission-building entity is eligible for recovery of 100% of prudently incurred costs of a transmission facility or network upgrade approved by the CAISO which is subsequently cancelled by the CAISO or deemed to be no longer needed due to no fault of the PTO. SCE looks forward to the CAISO addressing this topic either in 2018 IPE or a separately launched stakeholder initiative in the near future.

CAISO/ICM 7 May 21, 2018