Stakeholder Comments

Submitted by	Company	Date Submitted
Ramsey Ayass rayass@semprautilities.com (858) 654 - 1649	San Diego Gas & Electric	02/06/2018

Please use this template to provide your written comments on the 2018 IPE stakeholder initiative Issues Paper posted on January 17, 2018.

Submit comments to InitiativeComments@CAISO.com

Comments are due February 7, 2018 by 5:00pm

The issue paper posted on January 17, 2018 and the presentation discussed during the January 24, 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

San Diego Gas & Electric ("SDG&E") echoes the California Independent System Operator Corporation's ("CAISO's") concern: "until clear direction exists on whether future procurement of renewables will continue to require Full Capacity Deliverability Status ('FCDS'), it may be premature to make dramatic changes to the TPD allocation process." Our procurement department has informed us that FCDS is not a requirement for generators seeking a Power Purchase Agreement ("PPA"). SDG&E agrees that it would be a good idea to examine this issue in the upcoming Interconnection Process Enhancements

("IPE") 2018. There could be a number of revisions that provide positive results without jeopardizing the stability of the allocation process.

4.2 Balance Sheet Financing

SDG&E does not support the removal of Section 8.9.2(2)(a) of Appendix DD since this criterion is a mechanism for demonstrating that a project is commercially viable. Instead, SDG&E prefers strengthening the balance sheet financing requirements within this section such that projects must provide evidence that they are prepared and able to balance sheet finance. SDG&E is also open to changing the TPD allocation scoring criteria. We support the following suggested mechanism for Interconnection Customers ("ICs") to attest to balance sheet financing:

- An executed loan agreement with a non-affiliated bank,
- Record of significant expenditures on development activities, or
- Record of non-revocable escrow account that can only be used for project development.

SDG&E supports EDF Renewable Energy ("EDF-RE") and Large-scale Solar Association's ("LSA") suggestion that for balance-sheet financed projects, the CAISO implement "a minimum forfeit amount" for serial-study projects, or an additional posting for cluster-study projects with low cost or no Network Upgrades. In both of the latter situations, loss of ability to claim partial security release for failure to secure an acceptable PPA, has little or no financial impact and therefore provides little or no impetus for such projects to move forward.

4.3 Participating in the Annual Full Capacity Deliverability Option ("AFCDO")

SDG&E supports changes to the annual option. This includes requiring AFCDO projects to have the same TPD retention criteria as projects going through the TPD allocation process. We expect that this would reduce the potential for what the issue paper has described as "gaming."

4.4 Change in Deliverability Status to Energy Only

SDG&E supports considering additional opportunities for projects to convert to energy only deliverability status. We also agree that at a minimum, projects should remain responsible for their allocated costs for Delivery Network Upgrades needed by other projects. In this way, late conversion to energy only status does not have a negative cost impact on the other projects or the PTO. SDG&E supports the CAISO's proposal that a project's cost responsibility not be adjusted if the CAISO converts the project to energy only deliverability status due to failure to meet commercial viability criteria or TPD retention criteria. Under this proposed enhancement, if a project withdraws after being converted to energy only deliverability status for failure to meet commercial viability or TPD retention criteria, then any non-refundable financial security will be based on the project cost responsibility prior to converting to energy only deliverability status.

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

SDG&E supports Energy Only projects' ability to re-enter the CAISO queue for Full Capacity. This allows projects to get on-line as Energy Only and then convert to Full Capacity if and when indicated by the project's commercial interests. SDG&E does not believe such conversion will result in ratepayers being inappropriately on the hook for network upgrade costs. FERC has determined that network upgrades provide benefits, in varying degrees, to all ratepayers. For this reason, FERC has determined it is appropriate for ratepayers to bear the costs of such upgrades. FERC's policy applies whether a network upgrade is triggered by one generator or many. The CAISO's annual Transmission Planning Process ("TPP") provides another mechanism for identifying network upgrades that provide wide benefits for consumers.

4.6 Options to Transfer Deliverability

SDG&E would support the CAISO clarifying the methods by which deliverability may be transferred from one entity to another under different scenarios. SDG&E recommends that the CAISO provide stakeholders with the opportunity to comment on any such clarification. We are not opposed to having a deliverability transfer option for behind the meter capacity expansion.

4.7 Transparency on Availability of Deliverability

SDG&E believes the CAISO provides transparency for the availability of deliverability.

4.8 Commercial Viability Criteria – Continuous Compliance Obligation

If the CAISO ends up discussing this initiative in IPE 2018, SDG&E will provide comments.

4.9 Interim Deliverability Status

SDG&E believes that the discussion in the CAISO's IPE 2018 Issue Paper (dated 1/17/2018) satisfies the question posed by LSA and does not believe that this is an issue that needs to be brought up in this year's IPE.

4.10 Effective Load Carrying Capacity

SDG&E is awaiting the CAISO's review of their deliverability methodology and understands that the technical study involved is highly complex. SDG&E will comment on the initial results of this effort when it is available in the 2018-2019 transmission planning cycle.

4.11 Cancellation or Delay of CAISO Approved Transmission Projects

SDG&E agrees with the views expressed by the CAISO regarding this topic, and does not believe that this issue should be included in the 2018 IPE initiative.

5. Energy Storage

5.1 Distributed Energy Resources

For the reasons stated in the Issue Paper, SDG&E agrees that this topic should not be included in the 2018 IPE initiative.

5.2 Replacing Entire Existing Generator Facilities with Storage

SDG&E requests that the CAISO clearly define the maximum percentage of an existing project that can be replaced with energy storage.

5.3 Deliverability Assessment for Energy Storage Facilities

SDG&E believes that the CAISO has addressed the concerns raised by stakeholders through the clarifications provided in the issue paper. This topic does not require further consideration in the 2018 IPE initiative.

6. Generator Interconnection Agreements

6.1 Suspension Notice

SDG&E supports the CAISO's proposal to amend Article 5.16 of the LGIA to require any request for suspension to include a start and end date, and provide the CAISO the ability to approve the suspension period.

6.2 Affected Participating Transmission Owner

SDG&E is not opposed to clarifying policies for ICs and PTOs regarding financial considerations when ICs must contract with two separate PTOs for the construction of the interconnection facilities and network upgrades.

6.3 Clarify New Resource Interconnection Requirements

SDG&E supports updating Section 25 of the CAISO tariff to clarify New Resource Implementation ("NRI") requirements.

6.4 Ride-through Requirements for Inverter based Generation

This is an important topic. SDG&E appreciates the CAISO seeking to address ride-through requirements for ICs in the 2018 IPE initiative. SDG&E supports a ride-through requirement for new generators. Such equipment reduces the instances in which generators will be unnecessarily tripped off-line. SDG&E does not believe it is fair to require existing ICs to retroactively change their interconnection requirements – effectively moving the goal posts after the game has begun. SDG&E notes that existing generators already have commercial incentives to add or modify equipment to provide ride-through capability.

SDG&E believes that all generators, including small generating facilities (less than 20MW) should be treated the same. All new generators should be required to adhere to ride-through requirements.

6.5 Affected System Options

SDG&E believes that the current coordination and review provisions allow sufficient opportunity for the CAISO to provide support to ICs and Affected System Operators. This topic should not be included in the 2018 IPE initiative.

6.6 Modeling Data Requirements

SDG&E agrees with the CAISO that: "the lack of validated data compromises the accuracy of power system models utilized to predict the ability of the CAISO system to withstand credible contingencies on the CAISO system. It also compromises our ability to maintain accurate models as required for NERC/WECC compliance."

In connection with MOD-032 compliance requirements, SDG&E supports adding modeling requirements. Currently (and historically), modeling requirements have not been sufficient and many existing generators have very outdated and inaccurate models. In some cases, they have no models. It would be ideal if tariff provisions were added to require all ICs, regardless of size and voltage level, to provide EPC and DYD data “as-builts” meaning when a project achieves COD (or ISD) then they are required to provide an EPC and DYD of exactly what was built. Additionally, the tariff should require the provision of actual test data, which is needed to validate the models that are provided. SDG&E’s experience is that there are many situations where the PSLF modeling data is not an accurate representation of what the generator actually built. Since the IC is online, they do not see a necessity to provide a model reflecting what was actually installed in the field.

7. Interconnection Financial Security and Cost Responsibility

7.1 Maximum Cost Responsibility for NUs and Potential NUs

SDG&E supports the CAISO’s belief that these cost responsibility principles should be defined more clearly in the CAISO tariff, especially when it comes to “Potential Network Upgrades.” SDG&E believes that the trigger to constructing a Network Upgrade (and subsequent removal of funding responsibility for said upgrade from later queued projects, a Potential Network Upgrade) should be that “enough projects” responsible for the Network Upgrade must have a signed GIA, must provide the third posting and written authorization to proceed. As an example, say projects A, B, C and D all contribute to overstressed breakers and the cost of the circuit breaker replacements are split between the four projects. If projects A and C alone overstress the breakers and they provide a third posting, with written authorization to proceed then SDG&E would commence construction on the NU. However, if projects B and D alone do not overstress the breakers, then SDG&E will not commence construction of the NU, even if these two projects do provide a third posting and written authorization to proceed. This is because projects A and C may subsequently drop out, eliminating the need for the NU.

With the exception of the edits to Potential Network Upgrades, SDG&E agrees with the following language that the CAISO is proposing:

> **Maximum Cost Responsibility for Network Upgrades**: The total costs allocated for all Network Upgrades assigned to an Interconnection Customer, based on the lesser of the costs for such Network Upgrades assigned to the Interconnection Customer in the final Phase I Interconnection Study, or the final Phase II Interconnection Study and will include the cost of Potential Network Upgrades. The Maximum Cost Responsibility for Network Upgrades shall be subject to further adjustment based on the results of the annual reassessment and the criteria for changes to the Maximum Cost Responsibility in the reassessment process provisions in Appendix DD.

> **Current Cost Responsibility for Network Upgrades**: The cost for Network Upgrades used to calculate the Interconnection Financial Security requirement when the Interconnection Financial Security requirement is due, which does not include the cost of Potential Network Upgrades.

Potential Network Upgrades: Network Upgrades, including Stand Alone Network Upgrades (“SANU”), that are required by a project for its selected level of service whose cost responsibility is assigned to one or more prior cluster projects where at the time that a study report is completed all of those prior cluster projects have not executed a Generator Interconnection Agreement, provided the third Interconnection Financial Security posting, and provided written authorization to proceed for the Potential Network Upgrade. A Network Upgrade stops being a Potential Network Upgrade and the cost responsibility becomes the responsibility of a project when all prior cluster projects assigned a cost responsibility allocation for the Network Upgrade withdraw without having executed a Generator Interconnection Agreement, provided the third Interconnection Financial Security posting, and provided written authorization to proceed for the Potential Network Upgrade. This will also cause the costs for this Network Upgrade to be included in the project’s Current Cost Responsibility for Network Upgrades, up to the projects Maximum Cost Responsibility at that time.

CAISO states that the purpose of this enhancement is to more clearly define cost responsibility principles in the CAISO tariff. SDG&E believes that the proposed definitions will provide additional clarity and help to prevent confusion about the terms “maximum cost responsibility” and “current cost responsibility.” SDG&E supports the inclusion of this topic in the 2018 IPE initiative.

7.2 ITCC for Non-cash Reimbursement Network Upgrade Costs

The “Non-cash reimbursable” NUs could be subject to ITCCA, depending on whether the IC’s funding advances meet the Safe Harbor guidelines for being deemed taxable or non-taxable, as provided by the IRS notices on ITCCA.

7.3 Financial Security Postings and Non-Refundable Amounts

SDG&E echoes the CAISO’s stance that the current non-refundable amounts are appropriate. As noted by First Solar, requiring interconnection customers to have “skin in the game” is a legitimate reason to require significant deposits and helps ensure that only viable generators remain in the queue. Subject to PG&E better explaining their IPE 2018 issue, SDG&E agrees that financial security postings and non-refundable amounts are not matters that should be included for consideration in the 2018 IPE initiative.

7.4 Queue Clearing Measures

SDG&E feels that the current commercial viability criteria are sufficient, especially since the CAISO requires projects to provide quarterly detailed reports of the project status so that if a project is not progressing, the CAISO can work with them early as possible to get the project back on track or withdrawn. SDG&E agrees with the CAISO that the GIDAP measures currently in place for queue management, including the review for commercial viability, have helped to move projects forward. We also believe that a one-time security holiday would have an adverse/negative impact on SDG&E (and other PTOs) as well as other ICs without commensurate benefits. SDG&E supports the CAISO’s proposal to not include this issue in the 2018 IPE initiative.

7.5 Shared SANU and SANU Posting Criteria Issues

Shared Stand Alone Network Upgrades ("Shared SANU")

SDG&E agrees that it is not appropriate to create specific criteria, and place in the CAISO tariff or GIDAP BPM, regarding what SANU's could be built by the Interconnection Customer. As mentioned in the Issue Paper, each PTO has unique issues and circumstances that can lead to different determinations by the parties on what SANUs an IC will be allowed to build. SDG&E also believes that the determination should be made on a case-by-case basis so we don't recommend changing Appendix DD when it comes to SANUs.

SDG&E is open to the idea of removing the qualification from the GIDAP BPM that cost responsibility for a SANU must be assigned 100% to one IC. Thus, this could be a Shared SANU.

Interconnection Financial Security Postings for Shared SANU

SDG&E disagrees with LSA's request regarding posting amounts required for projects sharing a SANU. SDG&E believes the CAISO's policy requiring that each project needing the SANU be assigned a cost responsibility of 100% through the second posting is essential to ensuring that there will be no risk of a negative impact to PTOs (and ultimately our ratepayers). SDG&E agrees with the CAISO that this matter should not be included in the 2018 IPE initiative.

7.6 Clarification on Posting Requirements for PTOs

Other than agreeing that it makes little sense for a PTO to "post" with itself, SDG&E has no comments at this time.

7.7 Reliability Network Upgrade Reimbursement Cap

In the example cited, the PTO would be responsible for funding the entire cost of the RNU, including the portion over $60k/MW, and will ultimately put the entire cost of the RNU into its TRR and be rate-based. It would more equitable to identify the RNU as a "Potential NU" for the second project in the example cited. Then, if the first project withdraws (as in the example), the cost responsibility for the network upgrade would become the cost responsibility of the project in the next cluster that it is assigned to as a Potential NU. SDG&E believes the executing of a GIA (of one project) should not release the cost responsibility (per GIDAP section 14.2.2) of the subsequent project. If "enough projects" initially responsible for the Network Upgrade provide a third posting and written authorization to proceed, then at that time we would be able to release the cost responsibility for the subsequent project.

7.8 Reimbursement for Network Upgrades

SDG&E feels that the proposal discussed in the paper represents a huge shift in policy and agrees that it should not be considered as an issue in the 2018 IPE initiative.

8. Interconnection Request

8.1 Study Agreement

SDG&E supports the CAISO's efforts to improve efficiencies in the interconnection process and as such, we are looking forward to changes in the IR form.

8.2 Revisions to Queue Entry Requirements

SDG&E is unsure what kind of "viability screenings" are being suggested by Westlands Solar Park. We agree with FERC/CAISO that there should be no barriers to entry for new generation.

8.3 Master Planned Projects (Open Ended and Serial Projects)

SDG&E appreciates Westlands Solar Park bringing up this issue, since all PTOs have had to work with the unique status of open-ended and serial projects, specifically master planned renewable energy projects. Although the CAISO's clarification on the current GIDAP provisions (which allow for phased generation facilities, decreases in capacity and project modifications) accommodates some of these issues, we do feel that this should be explored further in the 2018 IPE initiative. SDG&E believes that there could be potential improvements to better manage open-ended and serial projects.

8.4 Project Name Publication

SDG&E is not opposed to modifying the current confidentiality requirements for project names so that in the future they will be publicly available through the interconnection queue report accessible on the CAISO's public website. We think this would help support coordination with state agencies and provide additional transparency on project names for developers. We are curious as to how this will be received by the various ICs and within the developer community, since they are the ones that will be most impacted when it comes to confidentiality.

8.5 Interconnection Request Application Enhancements

<u>Project Naming</u>

SDG&E believes that this issue does not require any GIDAP changes and can be addressed/resolved through the GIDAP BPM Change Management process or through the CAISO's public website using the Prohibited Project Naming List ("PPNL").

<u>Changes to technical data</u>

SDG&E agrees with the CAISO that project data and details should generally be "locked-in" following the Scoping Meeting. However, we also think it is important to be flexible and allow changes beyond that on a limited case-by-case basis, depending on the particular circumstance and the ability to accommodate the change before the Phase I study base case development begins.

We do not feel that this issue needs to be discussed further in the 2018 IPE initiative.

FERC Order No. 827

This issue is highly important for SDG&E and we would like to provide our feedback in the future, when the CAISO decides to improve how the reactive power capability of projects is evaluated. SDG&E looks forward to working with the CAISO and stakeholders on this matter outside of the IPE 2018 initiative.

9. Modifications

9.1 Timing of Technology Changes

SDG&E understands certain stakeholders' concern that projects who have been in the queue for over 10 years received technology change approval is unfair. It does create an unfair advantage (especially for Serial and open-ended projects) and is an admission that the pre-modification project was not commercially viable. We believe that it is a good idea to establish a cut-off for project technology and fuel type changes.

9.2 Commercial Viability – PPA Path Clarification

SDG&E supports the CAISO proposal to clarify that an interconnection customer's decision to either a) balance sheet finance, or b) pursue additional PPA opportunities during the grace period, will be a binary election that must be made during the initial MMA assessment to extend the COD past the 7/10 years.

9.3 PPA Transparency

SDG&E supports the CAISO's intention to clarify this requirement more explicitly in the tariff in the 2018 IPE initiative.

9.4 Increase Repowering and Serial Re-Study Deposit

SDG&E agrees with the CAISO's proposal to increase the study deposit for repowering and restudying serial projects to $50,000. SDG&E notes that any amounts in excess of actual study costs will be refunded. We appreciate that the CAISO will be including this proposal in the 2018 IPE initiative on an expedited basis.

9.5 Clarify Measure for Modifications After COD

SDG&E supports the CAISO clarifying these tests in the tariff and GIAs. We are pleased that this will be included in the 2018 IPE initiative.

9.6 Short Circuit Duty Contribution Criteria for Repower Projects

SDG&E agrees that due to the current differences in determinations for existing and planned projects, more consistent criteria should be applied to short circuit duty tests for repower and modification requests. We think it is a good idea to address these potential enhancements in the 2018 IPE initiative.

9.7 Material Modification for Parked Projects

SDG&E shares the CAISO's belief that the intent of parking is to remove a project from further obligations, as well as restricting project modifications requests, while the project seeks TPD in the next allocation cycle. SDG&E agrees with the CAISO's proposal to restrict all work while a project is parked, including modification requests (and GIAs).

10. Additional Comments

SDG&E appreciates the CAISO's effort in trying to improve and enhance the current GIDAP. We also support the goals of limiting risk to PTOs and ensuring that most viable projects proceed appropriately.