Stakeholder Comments Template

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<th>Submitted by</th>
<th>Company</th>
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<tbody>
<tr>
<td>Sebastien Csapo (415-973-7370)</td>
<td>Pacific Gas &amp; Electric</td>
<td>May 18, 2016</td>
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Please use this template to provide your written comments on the ESDER Phase 2 stakeholder initiative Third Revised Straw Proposal posted on April 17, 2017.

Submit comments to InitiativeComments@CAISO.com

Comments are due May 18, 2017 by 5:00pm

The Third Revised Straw Proposal posted on April 17, 2017 and the presentation discussed during the May 4, 2017 stakeholder conference call can be found on the ESDER Phase 2 webpage.

Please use this template to provide your written comments on the Third Revised Straw Proposal topics listed below and any additional comments you wish to provide.

1. Alternative Baselines to Enhance Demand Response

Section 5.1.3 of the Third Revised Straw Proposal provides the alternative baselines proposal that was developed by the Baseline Analysis Working Group ("BAWG"). The CAISO requests that stakeholders provide comments on the proposal in the following areas:

a) Do stakeholders support the BAWG’s recommended baselines for adoption by the CAISO?

b) Does the BAWGs proposal report, April 4, 2017 version, provide the necessary level of detail for demand response providers to implement the proposed baseline options?

Comments:
PG&E supports the BAWG’s recommended baselines for adoption by the CAISO.

PG&E requests that the CAISO provide additional implementation details, particularly around CAISO’s new requirement that the DRP and SC will now have the responsibility of calculating all baselines.1

In summary, PG&E offers the following changes and comments:

1. CAISO or CAISO’s Department of Market Monitoring (DMM) should demonstrate that they have the functionality to validate the baseline numbers submitted by the DRP and SC.
2. CAISO should clarify how the Default Load Adjustment (DLA) will be impacted under each proposal.
3. PG&E requests that CAISO provide specifications regarding what mechanism will be necessary to convey the proposed Settlement Quality Metered Data (SQMD).
4. CAISO should be aware that the ability and timing associated with implementing the baseline proposals is dependent on rate recovery from the CPUC.

Additional details are provided below.

1. CAISO or CAISO’s DMM should demonstrate that they have the functionality to validate the baseline numbers submitted by the DRP and SC.

CAISO states that three protections will be in place to ensure that baselines are not manipulated, as the calculation of baselines moves from the CAISO to the DRP and SC, including: 1.) relying on a pre-approval process for the DRP/SC to specify how the DRP/SC will perform the calculation in compliance with tariff requirements for the methodology requested, 2.) requiring an annual DRP/SC self-audit, and 3.) allowing for CAISO to audit any DRP/SC on an as-needed basis.

PG&E supports these auditing provisions, however, CAISO or CAISO’s DMM should have provisions in place to validate the numbers submitted by the DRP/SC. Accordingly, CAISO should also notify stakeholders how it plans to validate the numbers submitted by DRPs and SCs.

2. CAISO should clarify how the DLA will be impacted under each proposal.

If the DLA is applied, the LSE should also have the ability to calculate the meter quantity (submitted by the DRP) to validate that the DLA applied by the CAISO is correct.2

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1 This includes calculating the current 10-of-10 customer load baseline, performed by the DRP or its SC and submitted to the CAISO by the SC as SQMD.
PG&E would also like CAISO to clarify if CAISO will provide the DRP’s chosen baseline methodology to the LSE if a DLA is applied and, if not, what would the remedy or dispute resolution process look like?

3. **PG&E requests that CAISO provide specifications regarding what mechanism will be necessary to convey the proposed Settlement Quality Metered Data (SQMD).**

   PG&E requests that CAISO provide specifications regarding what mechanism will be necessary to convey the proposed SQMD meter data. In order to support all the proposed CAISO baselines, PG&E will need to build out the functionality specifications to perform the calculation needed to support these new baselines.

   Today, PG&E submits PDR/RDRR SQMD data to the CAISO Demand Response System. Until CAISO releases specifications, PG&E does not know if a mechanism to convey the proposed SQMD meter data exists today and accordingly requests CAISO’s clarification.

4. **CAISO should be aware that the ability and timing associated with implementing the baseline proposals could be dependent on rate recovery from the CPUC.**

   Any new implementation of CAISO baseline methods and operational practices could require CPUC approval as it will require additional funding to implement.

2. **Distinguishing between Charging Energy and Station Power**

   Section 5.2.3 of the Third Revised Straw Proposal provides the station power proposal developed by the CAISO. The CAISO requests that stakeholders provide comments on the proposal in the following areas:

   a) Given that the California Public Utilities Commission (“CPUC”) has issued a Decision on its Track 2 storage issues, it is prudent for the CAISO to seek feedback from stakeholders on what changes should be made to the CAISO tariff in light of potential changes to retail tariffs.

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2 The goal of the DLA is to avoid double compensation for demand response and payment for imbalance energy by preventing the Scheduling Coordinator from being compensated for the imbalance energy from the demand response load curtailment. Mathematically, the DLA is the quantity of the DR provided added to the metered load quantity of the SC representing the LSE, associated with the demand response.
b) The CAISO believes that it also may be prudent to reduce the amount of verbiage in the CAISO’s station power definition. A simpler approach for the CAISO’s purposes could be to define station power simply as energy to serve load located on a generating unit site and jurisdictional to the local regulatory authority and settled pursuant to a retail tariff. The CAISO request stakeholder feedback on this subject.

c) Based on the current CPUC Decision on its Track 2 storage issues, the CAISO’s principal concern is that there could be potential for storage resources to “commingle” their charging load and station power load. The CAISO requests stakeholder feedback on what CAISO tariff revisions will be necessary to ensure that this issue does not arise. One solution could be to require that all wholesale load and retail load be metered completely separately. The CAISO is interested in other potential solutions that would not require separate metering and clear electrical bifurcation of loads.

Comments:

Changes to the tariffs should be consistent with wholesale eligibility in both gas and electric applications. A modification that would exclude energy used to charge batteries for later resale is appropriate and consistent with conventional generation. In conventional generation, station power is used to provide auxiliary power and it is thus not resold.

The additional modification to exclude specific uses from station power could be inconsistent with the definition and implementation of station power in conventional generation. The existing station power for conventional generation includes pumping losses, efficiency losses due to cooling tower operation, and power conversion from gas (chemical energy) to electrical energy.

PG&E believes that separate meeting should be required and to implement this for storage, subtractive calculations are required. The metering arrangement for station power should be at the sole discretion of the LSE. PG&E has concerns when not having separate metering or sub-metering, as it would require estimations, which are inherently inaccurate and add administrative costs.

3. Net Benefits Test

Section 5.3.1 of the Third Revised Straw Proposal provides the net benefits test proposal developed by the CAISO. The CAISO requests that stakeholders provide comments on the proposal.

Comments:

PG&E suggests the following indices for other EIM participants.
4. Increase Load Consumption as Demand Response Enhancement

Section 6.1.4 of the Third Revised Straw Proposal provides an update on the status of work on this topic. The CAISO believes that there are several first priority policy issues that must be addressed before a wholesale load consumption product can be developed. The CAISO looks forward to collaborating with the CPUC and Load Consumption Working Group to help resolve these fundamental issues and develop a path forward for designing and implementing a bi-directional Proxy Demand Response product. The CAISO requests that stakeholders provide comments on the discussion in Section 6.1.4.

**Comments:**

PG&E appreciates CAISO’s work to-date as a part of the Load Consumption Working Group to explore the ability for PDR to consume load based on a CAISO dispatch instruction. PG&E agrees with CAISO that in order to move forward with such a product, important questions need to be answered with stakeholders at the CPUC including how such a product interacts with Time of Use rates and demand charges. PG&E also agrees with SCE’s comments that there is a risk that a load increasing DR product could result in additional uplift since both the DR resource and LSE load are being compensated for the increased load during periods of negative prices.

PG&E looks forward to working with CAISO, the CPUC and other stakeholders, in addition to leveraging lessons learned from our Excess Supply Side Demand Response Pilot.

5. Non-Generating Resource Enhancements

Section 6.2.4 of the Third Revised Straw Proposal provides an update on the status of work on enhancements to the non-generating resource model. The CAISO requests that stakeholders provide comments on the discussion in Section 6.2.4.

**Comments:**

PG&E has submitted comments on NGR enhancements throughout the ESDER stakeholder initiative, as well as in related initiatives, and looks forward to responding to issues and proposals in Phase 3.
6. Multiple-Use Applications
Section 6.3.3 of the Third Revised Straw Proposal provides an update on the status of work on multiple-use applications. The CAISO requests that stakeholders provide comments on the discussion in Section 6.3.3.

Comments:
PG&E has no comment on MUA issues at this time, and looks forward to participating in Phase 3.

7. ESDER Phase 3
Section 7 of the Third Revised Straw Proposal provides a discussion about the topics that the CAISO currently anticipates will be within the scope of a third phase of the ESDER initiative. The CAISO requests stakeholder input on additional topics that could be included in the scope for ESDER phase 3.

Comments:
PG&E has no comment.

8. Other comments
Please provide any additional comments not associated with the topics above.

Comments:
PG&E has no comment.