

Stakeholder Comments Template

| Submitted by | Company | Date Submitted |
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Please use this template to provide your comments on the ESDER Phase 2 stakeholder initiative Issue Paper posted on March 22 and as supplemented by the presentation and discussion during the stakeholder web conference held on April 4, 2016.

Submit comments to InitiativeComments@CAISO.com

Comments are due April 18, 2016 by 5:00pm

The Issue Paper posted on March 22 and the presentation discussed during the April 4 stakeholder web conference may be found on the [ESDER Phase 2](#) webpage.

Please provide your comments on the Issue Paper topics listed below and any additional comments you wish to provide using this template.

NGR enhancements

The CAISO is proposing to explore two possible areas of NGR enhancement: (1) representing use limitations in the NGR model, and (2) representing multiple configurations in the NGR model.

The CAISO is requesting stakeholders provide comments and consider the following:

- Are these two possible areas of NGR enhancement the highest priority NGR enhancements to pursue in ESDER Phase 2?
- Are there other areas of NGR enhancement that are of higher priority that should be pursued instead? If yes, which ISO-proposed NGR enhancement should be omitted from the scope?
- Please provide examples of use cases that support the NGR enhancements you view are of the highest priority and should be pursued in ESDER Phase 2.

Comments:

Use limits are important to storage and other DERs that have to manage energy parameters that may not be knowable to the CAISO market optimization and, as such, Olivine sees this as a priority. We will leave specifics of operating characteristics to the technology vendors, there certainly will be circumstances that impact the performance of storage resources at various states of charge and might be addressed by multiple configurations.

We believe that a single participation agreement for NGRs is a higher priority at this time than multiple configurations since it is a market entry threshold issue.

Demand response enhancements

The CAISO is proposing to explore two possible areas of demand response enhancement: (1) Exploring the ability for PDR to be dispatched to both curtail and increase load, and provide regulation service; and (2) developing alternative baselines to assess the performance of PDR and RDRR.

The CAISO is requesting stakeholders provide comments on these two areas of enhancement and consider the following:

Demand response enhancement topic area #1 – Ability for PDR to both curtail and consume energy:

- What issues does this working group need to address and resolve to enable load consumption capability? For example:
 - How would financial settlements work given wholesale bids cause an increase in retail consumption and demand?
 - What does consumption mean? Is consumption when a load exceeds its “normal” maximum consumption at certain times or under certain conditions?
 - What are appropriate baselines/Performance Evaluation Methods?
 - Is there any differences if load consumption results from a BTM device versus true load consumption?
 - Retail and wholesale impacts of over or under performance?
 - CAISO Grid Management Charges for load consumption?
- Are any state policies impacted by wholesale-directed retail load consumption?

- Suggest a proposed schedule and milestones for working group to deliver a Draft Final Proposal by September 8, 2016 (use the stakeholder process schedule on pages 22-23 of the March 22 Issue Paper as a guide).

Comments:

The Issue Paper and the comment template bullets cover a number of key issues that are related to Demand Response increased consumption including the path that leads to Demand Response frequency regulation participation. While challenging, these issues are not insolvable and are particularly important to address as the grid is experiencing significant changes to net load patterns that could benefit from additional consumption at various times of the day and different seasons that are not easily addressed by retail rate making due to their transient nature. Further, with the prospect of expanding balancing authority boundaries to include other western states, it is time to develop policies and practices that are compatible with multiple State Commissions.

We also think it useful to consider both “increased consumption” particularly for load shifting to manage over-generation and take advantage of low prices *and* to enable frequency regulation from behind-the-meter. While ideally a single behind-the-meter asset could provide both services, they ultimately may support very different use cases and business models.

In addition, there are two issues defined in the Olivine Challenges and Barriers report that are directly applicable to these cases:

1. We think it important to reflect on the definition of “export” and its legal basis from the perspective of wholesale market treatment of demand response. For example, must any export across the whole-premises meter be defined as wholesale energy sale, or is the netting over a longer time window what should be considered? Relaxing this definition may open the door to innovations behind the meter that are not – sometimes artificially – constrained to current load.
2. The elimination of energy settlement from – perhaps as an option – would greatly simplify the metering aspect of a behind-the-meter frequency regulation asset. While the discussion about this in the past has revolved around whether or not the CAISO NGR model is “energy neutral”, Olivine suggests that this is irrelevant for behind-the-meter because all energy would be accounted for on the retail side.

Olivine looks forward to participating in this working group and the prospect of producing a Draft Final Proposal by early September may be aggressive given the number of items that need to be considered, but is up to the challenge.

Demand response enhancement topic area #2 – Alternative baselines to assess the performance of PDR/RDRR:

- What baseline methods should the CAISO add and why?
- If a performance method is recommended that requires a control group, how would third parties be able to cost-effectively set-up and operate control groups? Are there services the UDC could provide in this area?
- What tools and capabilities will the CAISO require to assess best fit for different types of PDR aggregations?
- Suggest a proposed schedule and milestones for working group to deliver a Draft Final Proposal by September 8, 2016 (use the stakeholder process schedule on pages 22-23 of the March 22 Issue Paper as a guide).

Comments:

This is an important item as it is well documented that the current exclusive baseline doesn't accurately reflect the event performance of all types of demand response. Olivine is hopeful that as much as anything, in addition to identifying one or more alternative baselines to address known measurement inaccuracies, a process by which to update and add alternatives is an outcome of the current effort. This is important as new technologies that can contribute to the reliable operation of the grid may have not yet fully emerged and performance measurement issues may only surface in the future.

Multiple-use applications

To avoid redundant and potentially divergent efforts the CAISO will initially address this topic by participating in the CPUC Order Instituting Rulemaking (R.) 15-03-011, Track 2. The CPUC and CAISO are planning to hold a joint workshop May 2-3, 2016. If the CPUC proceeding identifies issues that should be addressed in a CAISO initiative, or develops proposals the CAISO should consider formally adopting, the CAISO can open a new initiative or expand ESDER Phase 2.

The CAISO is requesting stakeholders provide comments on this topic area as well as this proposed approach.

Comments:

Multiple use applications is an area of uncertainty that requires the attention of both the CAISO and CPUC and Olivine is pleased that there is a joint effort to underway to tackle the issue(s). To the extent that requirements for grid and distribution operations can be considered (to the extent known) while developing the policies that impact the providers is key to the development of a functional and durable framework. We support the proposed approach and realize that if the outcome of the workshop or subsequent discussions results in the need for a new initiative or expansion of ESDER Phase 2, some reprioritizing of ESDER phase 2 may be required.

Distinction between charging energy and station power

Under this topic the CAISO intends to resolve the distinction between wholesale charging energy and station power. Although this is also a topic in Track 2 of the CPUC's energy storage proceeding, station power is specifically addressed in the CAISO tariff and the CAISO will primarily address this issue in ESDER Phase 2. However, because the question of station power is inherently jurisdictional, the CAISO intends to also contribute to this topic in Track 2 of the CPUC's energy storage proceeding as may be necessary. In doing so the CAISO will seek to economize its staffing resources where possible and avoid redundant efforts, and will also seek to avoid the conflicts that have arisen in the past over the wholesale/retail line.

The CAISO is requesting stakeholders provide comments on this proposed approach as well as respond to the following questions:

- Should the CAISO modify its definition of [station power](#) to better accommodate energy storage resources?
- Should battery temperature regulation be considered part of charging (similar to efficiency loss) and subject to a wholesale rate, or should it be considered consumption/station power subject to a retail rate (where consumption exceeds output in an interval)?
- Are there any means besides separately metering the storage device by which the CAISO should distinguish between charging and station power?

Comments:

[\[insert comments here\]](#)

Review allocation of transmission access charge to load served by DER

The CAISO is proposing to review the rules for determining load subject to the transmission access charge (TAC) to reflect the effects of utility-side distributed generation, as proposed by Clean Coalition.

The CAISO is requesting stakeholders provide comments on this topic area. In particular, please comment on the three concerns the CAISO raised in the issue paper, and if possible offer examples to help illuminate these concerns.

1. Transmission investment is mainly driven by peak load conditions, which may not be reduced by adding distributed generation (DG).
2. New DG does not offset the cost of transmission that was previously approved and is currently in service.
3. Exempting some load from TAC charges would not decrease PTO revenue requirements, so some costs would be shifted to other customers.

Comments:

Olivine’s opinion is that it is premature to address this issue in ESDER Phase 2. While at a basic level, the concept of reduced TAC for DER production makes some sense, it potentially adds a layer of complexity to the current efforts to expand the participation of DERs into the CAISO market. In particular, since TAC is allocated to metered demand, the cost-causation broached by question 3 would seemingly require a broader rate-setting effort that would best be served with historical data that does not yet exist.

Other comments

Please provide any comments not associated with the topics above here.

Comments:

[insert comments here]