Stakeholder Comments Template

Submitted by	Company	Date Submitted
John Anderson	OhmConnect, Inc.	January 26, 2018
john@ohmconnect.com		



Please use this template to provide your written comments on the ESDER Phase 3 stakeholder initiative workshop held on January 16, 2018.

Submit comments to InitiativeComments@CAISO.com

Comments are due January 26, 2018 by 5:00pm

The CAISO held a stakeholder workshop to find consensus on the issues and identify additional topics for ESDER 3. The presentation and all supporting documents can be found on the <u>ESDER</u> $\underline{3}$ webpage.

Important: The CAISO requests stakeholders comment on the current list of priorities presented at the January 16, 2018 workshop. Based on the list below, high priority items (green) are considered in scope, low priority items (yellow) will be evaluated based on stakeholder comments and CAISO resource sufficiency, and no consideration items (red) will not be included in the ESDER 3 scope. Note that some items have been rewritten for clarification.

List of potential scope (DR, MUA, and NGR combined)

Demand response modeling limitations – Resolving the issue of RUC that leads to infeasible 5-minute dispatches and minimum/maximum run time constraint recognition.
Variable demand response (weather sensitive) – Exploring bidding options that reflect the variability of DR.

Removing the single LSE requirement/ DLA discussion – Remove the requirement of a single LSE for DR with a subsequent discussion on if the DLA will need to be modified. Load shift product - Development of load shift capability with a consideration of additional technologies than just behind the meter storage. Comprehensive review of MUA impacts – Review of potential tariff changes in accordance with CPUC's ruling/ working groups (including 24x7 participation requirement impact analysis). Recognition of a behind the meter resource in load curtailment – Extending the meter generator output (MGO) model to EVSEs. • Use-limitation status for NGRs – Exploring the option to allow NGRs to qualify as a uselimited resource. What constitutes use-limited status for NGR resources (i.e. batteries)? Bidding Costs – What bidding costs need to be captured for NGRs? (i.e. cost based offers) Establishing throughput limitations – Creating bidding options to manage excessive cycling of NGRs. Management of State of Charge (SOC) – Considering options for the management of SOC such as a multi-stacked ancillary service bid. Recognition of a behind the meter resource in load curtailment – Extending the meter generator output (MGO) model to sub-meter and develop individual baselines to all other individual load types. PDR/RDRR hybrid resource – Exploring how a DR resource that can be economic (PDR) for a limited amount and can transfer to become an RDRR. Continued discussion on use-cases for MUA – Determining participation models for new technologies such as micro-grids through use-case scenarios. **Comments:**

OhmConnect supports the scope of issues for the ESDER 3 stakeholder process outlined above, with one small change: we recommend that extending the MGO model to EVSE be considered within scope (i.e. changed from "yellow" to "green"). In our assessment, this is a worthwhile and straightforward change that can be accomplished without slowing the ISO's progress on other in-scope issues. We agree, however, that extension of the MGO model should remain limited to EVSE at this time.

Regarding development of a load shift product, OhmConnect believes the ISO should consider *from the outset* technologies besides just BTM energy storage. We appreciate the ISO's concerns about "wasteful" energy consumption – for example, stadium lights that are lit on a bright sunny day. However, we note that most end-use customers in California are on retail tariffs for which prices are positive even when wholesale prices are negative. Moreover, given

the ISO's current bid floor, most end-use customers' retail prices will always be greater than (the absolute value of) any negative wholesale prices, such that the *effective* prices customers pay for their energy are always positive. In other words, most end-use customers will *not* be incentivized to engage in wasteful energy consumption. Participation in load shift could therefore be limited to PDRs comprised of customers with BTM storage *or* customers on qualifying retail tariffs. The IOUs already provide third-party DRPs with data on customers' retail rate schedules under CPUC Rule 24/32, and the UDC/LSE could easily validate this information as part of its Location review process in DRRS.

Finally, OhmConnect appreciates the ISO's commitment to resolve certain modeling limitations that presently complicate PDRs' ability to participate in the RTM. However, at the January 16, 2018 stakeholder meeting, the ISO explained that it is developing solutions in initiatives *outside* of ESDER – e.g. CC&DEBE and CCE3. OhmConnect therefore asks that the ISO keep ESDER participants informed of relevant developments and milestones in these other stakeholder processes. Furthermore, we ask that the ISO consider interim solutions to the most pressing modeling limitations (e.g. treatment of PDR as intertie resources in the RTM) until permanent solutions can be implemented.

Other comments

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

Comments:

OhmConnect has no additional comments at this time.