Stakeholder Comments Template

Submitted by	Company	Date Submitted
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Please use this template to provide your written comments on the ESDER Phase 3 stakeholder initiative workshop, held on November 6, 2017.

Submit comments to initiativecomments@CAISO.com

Comments are due November 20, 2017 by 5:00pm Pacific

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 ESDER3 webpage. **Additionally, the CAISO is considering a December 7, 2017 workshop, if needed**. Please save the date and look out for all relevant market notices.

Important: As mentioned at the November 6, 2017 workshop, the CAISO requests that stakeholders take into consideration their top priority for ESDER 3 when writing in support for a topic.

1. Demand Response

The CAISO requests stakeholders' rank and provide their justification for the following topics:

- **Demand response modeling limitations** - Establish a methodology that could be used to develop acceptable commitment costs.
- **Demand response modeling limitations** - Evaluate current resource constraint options and propose solutions utilizing current or establishing new model options (including min/max run time) to appropriately represent resource capabilities and resolve issue leading to infeasible 5-minute dispatches when committed in RUC.

- **Demand response modeling limitations** - Explore development of an option similar to Intertie bidding, introduced at the October 4 Joint ISO and CPUC workshop
- **Weather sensitive demand response** - Explore bidding/model options (similar to VERS) that could be utilized to reflect weather sensitive DR. Include changes needed in NQC valuation, MOO and RAAIM.
- **Removing the single LSE requirement/ DLA discussion** - Remove the requirement of a single LSE for DR and modify use of default load adjustment (DLA)
- **RDRR economic buy-back of day-ahead awards for Hybrid RDRRs** - ISO prefers to pursue capabilities available with PDR outside of ESDER3.
- **Recognition of a behind the meter resource in load curtailment** - Extend the meter generator output (MGO) model to EVSEs and evaluate it applicability to other devices.
- **Load shift product** - Develop a load shift capability for behind the meter storage. (Currently an ESDER3 priority)
- **Load shift product** - Evaluate all applicable load for extension of the use of a load shift product.
- ***Additional topics*** - *Outside of the topics listed above, please include additional topics for consideration.*

Comments:

OhmConnect's rank-ordered DR issues for consideration in ESDER 3 are as follows:

1. Develop a load shift product

OhmConnect continues to support the CAISO's proposal to develop a wholesale load shift DR product. As LBNL has reported, "shift" DR has the potential to save the CAISO system hundreds of millions of dollars each year.[1] However, as OhmConnect stated in its October 18, 2017 comments on the ESDER 3 Issue Paper, there are technologies besides energy storage that can provide load shift capability. Accordingly, we encourage the CAISO to keep its initial load shift proposal as technology-agnostic as possible, so as not to prejudge the set of technologies (or the types of customers) that will be eligible to provide shift DR to the wholesale market.

2. Remove the one-LSE-per-PDR requirement

OhmConnect supports removing the current one-LSE-per-PDR requirement. This will lower the administrative costs to DRPs of participating in the CAISO market and help ensure customers are not "stranded" as load migrates from the IOUs to other LSEs (e.g. CCAs). OhmConnect recognizes that relaxing the one-LSE-per-PDR requirement will necessitate

[1] See March 1, 2017 LBNL 2025 *California Demand Response Potential Study: Final Report on Phase 2 Results*, page 5-14.

changes to (or elimination of) the DLA. To facilitate discussion of this issue, OhmConnect suggests the CAISO provide stakeholders with complete mathematical details of the DLA, as well as data on: (1) the frequency with which the DLA applies to LSEs' settlements; and (2) the magnitude of DLA-related adjustments to LSEs' settlements.

3. Address modeling limitations that complicate participation by PDRs in the RTM

OhmConnect requests that the CAISO address in ESDER 3 certain modeling limitations that presently complicate participation by PDRs in the RTM – in particular, by PDRs providing RA through the CPUC's DRAM pilot. PDRs in DRAM are obligated to be available to the RTM, via the RUC process. However, not all PDRs in DRAM are 5-minute dispatchable (at least not over their full operating ranges), and not all PDRs in DRAM have 5-minute meter data with which to settle in the RTM. CAISO can facilitate participation by these PDRs in the RTM by allowing added flexibility with respect to commitment costs and minimum and maximum run-time constraints.

2. Multiple-Use Applications

- **Relaxation of the 24x7 settlement requirement of DERs** - Create option for NGRs to opt out of ISO market participation and settlement in some intervals in order to provide services to other entities.
- **Continued discussion on use-cases for MUA** - Determining participation models for new technologies such as micro-grids through use-case scenarios.
- ***Additional topics*** - *Outside of the topics listed above, please include additional topics for consideration.*

Comments:

None at this time.

3. Non-Generator Resource

- **Use-limitation status for NGRs** Explore option to allow NGRs to qualify as a use-limited resource.
- **Establishing throughput limitations** - Create 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.
- ***Additional topics*** - *Outside of the topics listed above, please include additional topics for consideration.*

Comments:

None at this time.

4. Other comments

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

Comments:

None at this time.