

Stakeholder Comments Template

Submitted by	Company	Date Submitted
Melanie Gillette mgillette@cedmc.org 916-671-2456	California Efficiency + Demand Management Council (Council)	11/20/17

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 its 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.*

The California Efficiency + Demand Management Council (“Council”) appreciates the opportunity to provide comments on the ESDER Phase 3 priorities, generally, and the November 6, 2017 Workshop.

Weather-Sensitive Loads Need to be Addressed in ESDER 3

The Council strongly supports a process to address the variability of weather-sensitive demand response in the 2018 timeframe. It is important that the CAISO coordinates with the CPUC and the recently-formed resource adequacy (RA) working group that is addressing weather sensitive demand response in order to address the proper definition of weather sensitive load capacity and the related must offer obligation and performance requirements for these resources. This issue needs to be addressed by both agencies simultaneously in a coordinated fashion.

The Council was pleased with the acknowledgement in the ESDER 3 Issue Paper that, similar to wind and solar, the PMAx of some DR resources can vary with weather. The suggestion was made at the November 6 workshop to frame this as “variable demand response” to include all resources that change hour by hour. There seemed to be some consensus that “variable” is workable.

We encourage the CAISO to work with the CPUC to address this issue in a timely manner. There has been acknowledgement for years that the current NQC values do not recognize the unique

characteristics of these resources and thus do not fairly compensate these resources. It is not clear that the Effective Load Carrying Capability (ELCC) methodology is appropriate for demand response. The suggestion was made at the Workshop that a formula to predict qualifying capacity as a function of a weather forecast could be feasible and could be used to forecast demand response QC like wind and solar forecasts. The Council supports the recommendation to address this issue in a working group. Weather sensitive loads drive system peaks, so it is important to find a solution that recognizes the unique characteristics of the resource in the market design. Residential and other weather-sensitive loads are “variable,” but they are very reliable and predictable. They are a limited duration product, but they are also flexible and can be called with more frequency if given time to recharge.

CAISO made significant progress in ESDER 2 with the development and approval of weather day matching baselines to better reflect the characteristics of weather sensitive resources. The Council supports others in asking for the ESDER 3 solution to allow utilities and third-party demand response providers to use non-participant control groups.

The Council appreciated the presentation from Stem at the November 6 workshop and would urge CAISO to include thermal storage within the scope of the load-consuming demand response (bi-directional DR). There was a really helpful discussion at the workshop about incorporating the evolving capabilities of connected homes and smart buildings and to view weather sensitive loads such as HVAC controls as thermal storage resources. Weather sensitive load resources are charging when power is plentiful, cheap and cool (cooling the thermal mass of buildings if not separate thermal storage units in summer or heating it in winter) and discharging when called on to reduce local or systemwide demand (allowing the cooled thermal mass to absorb the heat of summer peak for a period, or discharging heat into the space in winter.) While we are considering the options for addressing the potential of weather sensitive loads, it is important not to prematurely foreclose the option of considering it as a form of storage resource.

Removing the Single LSE Requirement

The Council supports removing this requirement.

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:

The Council has no comments on this issue 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:

The Council has no comments on the NGR issues at this time.

4. Other comments

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

Comments:

[Insert comments here]