Stakeholder Comments Template

| Submitted by | Company | Date Submitted |
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The CAISO held a stakeholder workshop to find consensus on the issues and identify additional topics for ESDER 3.

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.

Comments:

The Office of Ratepayer Advocates (ORA) ranks the following three topics as high priority for demand response (DR) topics in the ESDER III initiative. ORA is not indicating a ranking preference for any other demand response topics at this time.

1) Weather sensitive demand response

Currently, the CAISO's Resource Adequacy Availability Incentive Mechanism (RAAIM) incentivizes weather sensitive DR to bid in to the CAISO market consistent with must offer obligations (MOO).¹ However, the CAISO's MOO is static while the performance of the DR resource depends on weather conditions. As a result, resources are forced to bid in a static value knowing that actual performance depends on the weather. If a resource cannot deliver the full amount of capacity, the resource must pay a penalty for any awarded energy that was not delivered. This issue is based on market rules that do not account for the predictable variability of weather sensitive DR. ORA prioritizes this issue to increase accuracy in the bidding of weather sensitive DR and to decrease the costs of DR programs for ratepayers.

2) Load shift product – Evaluation of all applicable load for extension of the use of a load shift product

The DR Potential and Goals Study completed in early 2017 by Lawrence Berkeley National Laboratory indicated that DR products that shift load between high-renewable and lowrenewable output times of day would provide more incremental value to the system than

 $^{^{1}}$ RAAIM will compare how each resource adequacy resource was required to bid into the energy market under its resource adequacy obligation with how the resource actually bid into the energy market, and assess a non-availability charge or make an availability incentive payment to the resource adequacy resource based on that comparison.

http://www.caiso.com/Documents/ResourceAdequacyAvailabilityIncentiveMechanismRAAIMAdvisoryPeriodExtension.html

traditional DR products that simply shed load.² In addition, initial analysis through the California Public Utilities Commission's (CPUC) Integrated Resource Planning process has also indicated that load shift resources can provide value at the system and local level.³ The CPUC has determined that it will explore options for load shift products through a 2018 working group process.⁴ ORA prioritizes this issue to ensure that CAISO staffing and resources are available to provide research and support for its efforts that will complement the CPUC load shift product development process.

3) Load shift product - Develop a load shift capability for behind the meter storage

Currently, the investor-owned utilities (IOUs) have been assigned energy storage procurement targets amounting to 1,325 MW of energy storage.⁵ In addition, AB 2868 authorizes the CPUC to approve up to 500 MW of additional energy storage split evenly among the IOUs. Efforts to develop the load shift product for behind the meter storage should be conducted in tandem with efforts to meet energy storage procurement goals. Prioritization of the development of a load shift capability for behind the meter energy storage will allow these efforts to advance in a manner that is efficient, avoids duplicative efforts, and maximizes benefits to the grid and to ratepayers.

2. <u>Multiple-Use Applications</u>

- 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:

ORA has no comments at this time.

² March 1, 2017 Final Report on Phase 2 Results: 2025 California Demand Response Potential Study, provided by Lawrence Berkeley National Laboratory.

³ Integrated Resource Plan Proposed System Reference Plan, released September 18, 2017.

⁴ CPUC Decision 17-10-017, pp. 55-56.

⁵ See Decision10-12-007, *Decision Adopting Energy Storage Procurement Framework and Design Program*.

3. <u>Non-Generator Resource</u>

- 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:

ORA has no comments at this time.

4. Other comments

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

Comments:

ORA has no additional comments at this time.