Stakeholder Comments Template

Submitted by	Company	Date Submitted
Rachel McMahon; rachel.mcmahon@cpuc.ca.gov; 415-703-1606 Jean Lamming; jean.lamming@cpuc.ca.gov Audrey Neuman audrey.neuman@cpuc.ca.gov Caitlin Pollock caitlin.pollock@cpuc.ca.gov	California Public Utilities Commission, Energy Division	March 7, 2018

Please use this template to provide your written comments on the ESDER Phase 3 Straw Proposal.

California ISO

Submit comments to InitiativeComments@CAISO.com

Comments are due March 7, 2018 by 5:00pm Pacific Time

Introduction

Thank you for considering these comments. Energy Division supports the Demand Response and Multiple Use Application priorities in the 2018 update to the ESDER 3 straw proposal. The February 15, 2018 straw proposal includes all three of Energy Division's top Demand Response priorities: the Load Shift product (for storage), removing the single LSE requirement/DLA discussion, and Demand Response Modeling Limitations, and the addition of our recommendation from our prior comments to include consideration of CAISO-jurisdictional issues associated with multiple use applications for energy storage.

We further note that the *CPUC's* Load Shift Working Group is seeking to develop a load shift and/or load consumption product that includes all end uses. We understand the CAISO's need for focus for the sake of expediency on a metered storage product.

Summary of Recommendations

- New Bidding Options for DR: proposals are insufficient to address the primary issue associated with DR dispatches in RUC.
- DR Load Shift Product: recommend considering how demand side impacts will be accounted for in RA load forecast.
- EVSE Submetering: recommend including the following two topics: accuracy and reliability, and load requirements.
- Multiple Use Applications: the CPUC working group created by D.18-01-003 has been expanded to include consideration of CAISO-jurisdictional services.

1. Demand Response

- New bidding and real-time dispatch options for demand response (DR)
  - Are there other considerations the CAISO needs to address to ensure resources can feasibly respond to dispatches in real-time?
- Removal of the single load serving entity (LSE) aggregation requirement and the need for application of a default load adjustment (DLA)
  - Is there general consensus for the removal of the DLA and including the NBT bidding rule, to enable multi-LSE aggregations?
- Load shift product for behind the meter (BTM) storage
  - Based on the product features outlined in the straw proposal, are stakeholder aware of any CPUC regulations that need to be evaluated for potential change to accommodate the proposed load shift functionality (i.e. any RA conflicts)?
  - Are there other product features that should be considered within the proposal?
- Measurement of behind the meter electric vehicle supply equipment (EVSE) load curtailment
  - What additional proposal details should the working group consider and/or address as the proposal is further developed?

Comments:

New bidding and real-time dispatch options for demand response (DR)

The Energy Division appreciates CAISO responding to the DR modeling limitations associated with infeasible 5-minute dispatches when PDRs are committed in RUC. As we and other affected stakeholders outlined in ESDER II, this is a basic, foundational problem for PDRs that must be addressed. The Energy Division also appreciates the CAISO developing an option similar

to intertie bidding– as introduced at the October 4 2017 Joint ISO and CPUC workshop– under which PDRs would have longer notification times and extended real-time dispatch intervals.

Within the three notification and dispatch options for PDRs included in the CAISO proposal, the Energy Division acknowledges that options 1 ("hourly block") and 3 ("15 minute dispatchable") do help to *slightly* ease participation limitations for PDRs. Option 2 ("hourly block with single change"), however, sounds administratively more complex, when considering the prospect of market participants modifying price points on every hour.

Overall, however, the Energy Division reiterates that many DR resources were fundamentally not designed to respond as quickly as is proposed in any of these options. Many DR resources are behavioral, i.e. human customers taking actions to reduce their load. Many CPUC approved DR tariffs allow for day ahead notification of events so that these human customers can prepare. As such, these proposals do not address the fundamental problem of PDRs' incompatibility (as a slower-start resource) with RUC commitment and real-time dispatch requirements.

Finally, while we do commend the creative thinking reflected in these proposals, the Energy Division feels that they do not address the persistent problem of DR being treated like a generator, when it simply is not. In line with California state goals of integrating DERs into the wholesale energy market and appropriately prioritizing DR (and select other non-GHG emitting resources) in the loading order, Energy Division calls for innovative approaches to valuing DR (as a non-generator) in ESDER IV. One possible approach would be to include additional fields in the CAISO data resource template that properly capture the characteristics of the demand response resources that require longer notice time.

Removal of the single load serving entity (LSE) aggregation requirement and the need for application of a default load adjustment (DLA)

Energy Division supports the removal of the single load serving entity (LSE) aggregation requirement. The current requirement makes it difficult for DR resources to meet the CAISO's minimum size requirements thereby delaying their integration into CAISO markets.

Load shift product for behind the meter (BTM) storage

Energy Division supports the Load Shift product as scoped in ESDER 3 and looks forward in ESDER 4 to working with the CAISO on a product that includes all Demand Response end uses. One question to address for the Load Shift product in ESDER 3 is this: How will the demand-side impacts be accounted for in the load forecast used for Resources Adequacy?

Measurement of behind the meter electric vehicle supply equipment (EVSE) load curtailment

Regarding EVSE submetering, as the proposal is further developed, we recommend that the following topics be included, for consideration by the working group:

> **Accuracy and reliability –** Sub-meters are not necessarily utility-grade meters, and while potentially a very useful tool for EVSE market participation, there may be reliability and

accuracy issues. It is important for the sub-meters to both record data correctly and to transmit it correctly. There are several points in data collection and transfer that can impact accuracy: while the car is charging, when data is transferred from the EVSE to the electric vehicle service provider (EVSP), and when the data is again transferred from the EVSP to CAISO/the IOU/the scheduling coordinator. With this in mind, it will be important to look at each of these areas in terms of data reliability and accuracy, and ensure there are detailed requirements for the sub-meter and the sub-metered data.

Load requirements – will the minimum capacity and response time for an EVSE aggregation be different than that of other demand response aggregations? If so, what will that be? What types of facilities does the working group envision participating (single-family homes, commercial fleets, commercial businesses with medium and heavy duty vehicles, multi-unit dwellings, government agencies, etc.)? Additionally, if solar is on site, how will the sub-meter load function with it?

2. Multiple-Use Applications
    - The CAISO proposes to perform a comprehensive review and analysis of what is needed to facilitate the rules and framework established in the MUA ruling.

The Energy Division is supportive, and appreciative, of the inclusion of this item in the scope for ESDER Phase 3. As described on the last stakeholder call, the CAISO is actively participating in the CPUC-led working group process to further refine the eleven rules, and examine any needed programmatic changes to implement those rules, as defined by Commission Decision (D.) 18-01-003 in R.15-03-011. As such, the scope of the working group has expanded to include CAISO-jurisdictional services. Energy Division looks forward to a continued collaborative relationship with the CAISO in this regard.

3. Non-Generator Resource
    - The CAISO proposes to develop a process to define use-limited status for NGRs.
        - What are the potential use-limited qualifying factors and types of documents to qualify use-limitation?

Comments:

Energy Division has no comment on this at this time.

4. Other comments

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

Comments:

Energy Division has no further comments at this time.