

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 Straw Proposal.



Submit comments to InitiativeComments@CAISO.com

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

The CAISO posted the ESDER 3 Straw Proposal on February 15, 2018 followed by a web conference on February 21, 2018. The presentation and all supporting documents can be found on the [ESDER 3](#) webpage. The CAISO requests your comments to the overall proposals scoped for ESDER3 along with the following specific questions:

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:

Olivine supports expanding “intertie-like” bidding options to PDR resources to allow for more realistic dispatches in the real-time market. CAISO should clarify that the hourly block schedule options would apply to economic real-time bids, not just self-schedules as indicated in the examples in the straw proposal. Hourly block schedules with 52.5 minute notification time could allow for more PDR resources to be available and be more accurately modeled in the real-time market. FMM scheduling functionality could be useful for more flexible resources that nevertheless would prefer minimum dispatch intervals greater than 5 minutes and/or get more than 2.5 minutes notification time. While there may be other options that allow for better representations of PDR capabilities, these three choices would be helpful in the interim, especially if they can be implemented in relatively short order.

Unfortunately, the enhanced flexibility of real-time scheduling does not solve for the issue of resources that are not able to respond with 52.5 minutes of notification (those designated at long-start). Resources that are day-ahead only RA resources by CPUC (or other LRA) designation should be accommodated without needing to bid start-up and/or minimum load costs that reduce (but do not eliminate) the chance of a RUC Commitment. CCE DEBE would give somewhat more flexibility in allowing commitment costs to be a variable bid parameter rather than an on/off Masterfile value, and would help clarify the applicability of minimum load costs to resources with 0 PMin. However, it would not fundamentally change the reality that neither type of cost is easily-defined or well integrated with PDR resources that are not actually operated in a similar manner to conventional generators.

Olivine supports the removal of the single LSE requirement and elimination of the DLA (although the two items are separable) as it improves the resource registration process as well as eliminating what has been shown to be a minimal “recovery” of double payment to the market. Further as pointed out in section 4.1.2, it opens the door to utilizing the NBT as a floor to bid acceptance for DR bids in SIBR to maintain compliance under FERC 745 and in alignment of the CPUC requirement for the bidding of bundled customers. One implementation challenge that comes to mind is that while normally the default energy bids for resources that have a real-time bidding requirement (in RUC) that fail to do so electively, is \$0/MWH. It would seem that any mechanism in SIBR that would reject PDR bids below the NBT would reject the default energy bids as well.

Olivine is encouraged that the initial “minimally functional” load shift product will include load curtailment as well. This may facilitate a faster path to implementation as one of the larger challenges for load shift is to develop the parameters and processes for verification/validation of any actual shift. One concern that Olivine finds with the issues identified in the straw proposal is that resources participating in “shift” would not be eligible to participate in RA. The same BTM storage resources that are earmarked for participation under this model may be able to separate shift periods from availability assessment hours under RA. While the concern regarding the applicability of the NBT to an increase in consumption (rather than competing to effectively provide generation) seems like a moot point, the bidding mechanism for a PDR bidding consumption at negative prices would have to allow for the submittal of bids below the NBT.

With respect to the development of the ESVE sub metering and extension of MGO performance measurement, the CAISO needs to be clear early in the process whether it will consider all EVSE use cases. There is a diversity in potential use cases since some instances would be banks of EV charges under a single sub-meter (as in a workplace) while others could be aggregations of single Level 1 and Level 2 charges (such as individual residences).

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.

Comments:

The utilization of DER Aggregations that are composed of loads or generation behind a retail customer meter has been discussed as a possible scenario for storage resources that provide multiple services. Olivine asks for clarification on what this participation model would look like, either with or without 24/7 participation (if allowed). It may require collaboration with the CPUC, IOUs, and potentially CCAs to resolve wholesale/retail settlement concerns that may arise from retail customers fully or partially participating in the wholesale market.

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:

The evolution of the second tier of NGR modelling rules is overdue as the expected predominate underlying NGR technology (utility scale resources including flywheels) has shifted since the inception of NGR to battery storage. However the modelling rules do need to be limited to elements that reflect technology limitations and not creating new market design rules. Olivine supports the CAISO in making this distinction and agrees that changes to AS bidding rules would be a fundamental change to the existing optimization and would need to be considered in the context of all participating resources.

4. Other comments

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

Comments:

If the CAISO is going to consider the broad gamut of ESVE sub-metering use cases (banks of EV chargers under a single sub meter as well as the need to aggregate data from single EV charges within an aggregation) in the EVSE sub metering element of ESDER Phase 3, it still isn't clear to Olivine why the improvement has to be limited to EVSE. It is not likely that there are other technology specific use cases that wouldn't fit into any EVSE models and there is no burden to the CAISO processes and should consider extension of MGO performance to any submetered, dispatchable load that can accurately be measured.