California ISO

Stakeholder Comments Template

Energy Storage and Distributed Energy Resources (ESDER) Phase 4

This template has been created for submission of stakeholder comments on the Straw Proposal Working Group Meeting for ESDER Phase 4 that was held on August 21, 2019. The paper, stakeholder meeting presentation, and all information related to this initiative is located on the initiative webpage.

Upon completion of this template, please submit it to initiativecomments@caiso.com. Submissions are requested by close of business **September 4, 2019.**

Submitted by	Organization	Date Submitted
Maria Belenky	*OhmConnect*	*September 4, 2019*

Please provide your organization's general comments on the following issues and answers to specific requests.

1. **Discussion on non-24x7 settlement of BTM Resources**

   Which areas will require the local regulatory authority to change its rules or provide clarification to load serving entities?

   OhmConnect has no comment at this time.

2. **Market Power Mitigation for energy storage resources**

   The two options proposed in the calculation of cycling costs.

   OhmConnect has no comment at this time.

3. **Variable Output Demand Response resources**

   While OhmConnect continues to believe that the ELCC methodology is not appropriate for demand response—in part because a DR-resources' Pmax, unlike the nameplate capacity of a wind or solar resource, is already the result of an expected deliverability calculation[1]—we appreciate CAISO undertaking an

[1] The nameplate capacity of wind and solar is an engineered value that represents the maximum possible output of that resource, regardless of when and how much of it can actually be delivered to the grid. A DR

illustrative LOLE study for stakeholder consideration. This will allow us to have an open discussion about specific aspects of the ELCC calculation and their applicability to demand response rather than speaking in generalities.

To that end, we provide the following comments on the CAISO-requested areas of feedback:

Data inputs and assumptions regarding DR availability

The inputs and assumptions presented by the CAISO generally appear to be appropriate. However, we would like to point out that because the data inputs reflect the operational characteristics of DR programs, and program requirements can change, the data the CAISO will see today may not accurately reflect DR programs going forward. One example is the "number of calls" data input. For instance, through 2019, DRAM resources were expected to be dispatched/tested twice in a contract period. Beginning in 2020, the CPUC raised this requirement to 50% of the contract months (i.e., up to 6 months in a year). We assume that this will substantially raise the "number of calls" that CAISO will see for DRAM resources beginning in 2020. Because this is a foreseen change, we recommend that the CAISO take it into consideration in its current exercise.

Feasibility of demand response providers submitting resource capability as real-time data

OhmConnect appreciates CAISO's efforts to improve market participation rules and requirements to allow variable-output DR to better reflect its day-to-day capabilities to the energy market. Overall, this effort is going in the right direction. However, we do not believe that it will be feasible for DRPs or their scheduling coordinators to submit updated forecasts in real-time. Developing this capability will be an onerous and costly undertaking that likely will not provide enough value to CAISO to be worthwhile.

As a DRP with weather-sensitive resources, we envision updating our capabilities based on *substantial* changes in the weather forecast. For example, if our QC was based on a daily high of 85ºF, but the actual expected temperature is 70ºF (or 100ºF), we would like the ability to bid less (or more) than the QC. Discrepancies of this scale will most likely be evident in time for us to submit a day-ahead forecast. They will surely be evident in time for us to submit an updated forecast day-of. Real-time temperature deviations from what was projected in the day-ahead forecast are unlikely to be substantial enough to warrant updates at 5-minute intervals. While being able to update projected capabilities with this amount of frequency may be an "ideal" scenario, the cost of developing the systems to do so will far surpass any marginal improvements in accuracy.

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resource's QC is not a theoretical max. Rather, it is determined using a methodology that takes deliverability during the AAH into consideration. Therefore, applying an ELCC % to nameplate capacity is quite different from applying it to a DR's QC. Doing the latter derates an already derated value. A DR's "nameplate" equivalent is probably more akin to the actual load of the customers in the resource, rather than it's calculated QC value.

We suggest that the CAISO allow DRPs to submit one forecast with their day-ahead bid and another, if necessary, to update this forecast day-of. While not ideal, this is likely more than sufficient.

4. **Additional comments**

   Please offer any other feedback your organization would like to provide from the topics discussed during the working group meeting.

   OhmConnect has no additional comments at this time.