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 for ESDER Phase 4. 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 **May 17, 2019.**

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

1. **Non-Generator Resource (NGR) model SOC parameter**

The Council reserves comment on this issue.

2. **Bidding requirements for energy storage resources**

The Council reserves comment on this issue.

3. **DR operational characteristics**

    a. Please provide comments on the CAISO's three options.

The Council reserves comment on this issue.

4. **Variable output DR**

    a. CAISO requests additional detail and reasoning from stakeholders who believe a more appropriate method exists for determining QC than applying an ELCC methodology.

- **The CAISO should more clearly define the applicability of its proposal.** It is unclear what definition the CAISO is applying when referencing variable-output demand response, or how broadly it might apply. The Council notes that demand response is comprised of a wide variety of resources that are extremely diverse, more so than any other resource. Applying an ELCC methodology to this broad grouping of resources is inappropriate, misleading, and unjust and unreasonable. In the absence of a clear definition, it is impossible to determine the proposal's scope, impact, or fit to the targeted resources whatever they may be. The CAISO cites weather-related variability, but again, with the broad variation of demand response resources, the extent to which weather plays a role in the characteristics they offer to the grid varies. There are many other factors that may impact customers' ability to reduce load, some of which are readily predictable and others of which would only properly be predicted through probabilistic analyses, and which render virtually most, if not all, demand response resources as "variable-output". These factors include the processes or appliances that would otherwise be in use at the time of an event, which can vary based on time of day, day of week or month, season, or other factors.

- **Applying an ELCC methodology to demand response is inappropriate.** The CAISO comparison of demand response to intermittent solar and wind resources ignores several fundamental differences between them. The CPUC adopted an ELCC methodology for intermittent renewables (i.e. solar and wind) based partially on the scale of proliferation of non-dispatchable variable resources, and concern about both their match to load shape as well as their diminishing capacity value as their proportional contribution to the energy supply increased. Demand response has virtually none of those characteristics. First, the current quantity of demand response participating in the CAISO market is substantially less than the amount of wind and solar that was in operation when the ELCC was adopted. Second, unlike most wind and solar which cannot be dispatched, demand response is not passive and can be actively dispatched when scheduled through the CAISO market. Unlike solar or wind, DR is not a "must take" resource, and the CAISO is not forced to take energy whenever DR providers feel like providing it. DR is dispatched only when the system needs it. Third, as noted above, demand response is not a single type of resources, but a broad class of varied resources that do not behave in the same way, and are not subject to the same type of correlated behavior to weather conditions as wind or solar. These major differences between DR and solar or wind resources are just not reflected in the Loss of Load Expectation analysis that is used to develop the ELCC factor.

- **Instituting an ELCC methodology does not address the CAISO's core concern.** The Council understands the CAISO's proposal is driven by a desire to address those demand response resources that are under-performing. However, the CAISO's straw proposal contains no analysis or documentation to demonstrate the breadth or severity of the problem of under-performing demand response, nor an explanation of how ELCC would focus on those under-performing resources

and better reflect their actual performance. Without this information or any sort of estimate of the benefits of an ELCC methodology, the proposal cannot be justified.

Furthermore, instituting an ELCC methodology will do nothing to drive improvements in this area, but it would broadly penalize all demand response resources in a fashion that is not just poorly tailored and ineffective, but discriminatory to the industry. The ELCC will simply devalue diverse demand response resources regardless of how well they perform. Instead, diverse demand response providers should be held to their QC commitments and be subjected to a rigorous but fair system of controls to ensure they do meet their commitments. With no proper analytical foundation to justify its impacts, the proposal cannot meet the requirements of the Federal Power Act.

- **The CAISO should allow the CPUC process that is currently under way, in which the CAISO is a participant, to address performance standards for Demand Response Auction Mechanism (DRAM) resources.** It is important to keep in mind that the DRAM is a pilot and it was intentionally designed to attract new entrants to the California market. As with nearly all pilots, its focus was not on strict compliance, but on testing technologies and approaches. As a logical step toward transitioning the DRAM to a permanent procurement mechanism, the Energy Division conducted its DRAM Evaluation Report to identify areas of improvement, some of which pertain to delivery of DRAM capacity on the part of some, but not all, DRAM Sellers. In response to the Energy Division's findings and recommendations, the CPUC has a process underway in the demand response proceeding to address the problems identified in the Evaluation Report. The CAISO has the opportunity to participate in that process and make its own recommendations. Those improvements approved by the CPUC will be reflected in the DRAM Pro Forma contract. The CAISO should wait for the CPUC to complete its DRAM evaluation and improvements process, rather than add additional variables that will confuse and distort the results of the improvements being addressed in that process.

  Though there is a process underway at the CPUC to improve the performance of DRAM resources relative to their QC value, there is no similar process for the IOU demand response programs. If the CAISO wants to improve the performance of IOU demand response programs in the wholesale market, it should recommend that the CPUC consider new performance requirements or reporting in the demand response proceeding. Again, until any improvements can be implemented and assessed, it would be inappropriate to adopt an ELCC method for demand response.

b. CAISO requests stakeholder feedback on controls needed to ensure that forecasts accurately reflect a resource's capability.

As stated above, no changes to market processes are necessary until improvements to the DRAM and IOU demand response programs are approved, implemented, and assessed.

5. **Non-24x7 settlement of behind the meter NGR**

   a. As a behind the meter resource under the non-generator resource model, any wholesale market activity will affect the load forecast. How will load serving entities account for changes to their load forecast and scheduling due to real time market participation of behind the meter resources?

   b. How would a utility distribution company prevent settling a resource at the retail rate when the behind-the-meter device is participating in the wholesale market?

   c. If a behind-the-meter resource is settled only for wholesale market activity, what would prevent a resource from charging at a wholesale rate and discharging to provide retail or non-wholesale services? How would this accounting work?

The Council reserves comment on this issue.

6. **Additional comments**

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