California ISO

Stakeholder Comments Template

Energy Storage and Distributed Energy Resources Phase 4

This template has been created for submission of stakeholder comments on the Draft Final Proposal and associated May 27 meeting discussions, for the Energy Storage and Distributed Energy Resources (ESDER) Phase 4 initiative. 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 **June 10, 2020.**

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.

The California Efficiency + Demand Management Council ("Council") appreciates this opportunity to provide comments in response to the CAISO's ESDER 4 Draft Final Straw Proposal and associated May 27, 2020 stakeholder meeting. These comments are limited to the Demand Response ELCC Study Preliminary Results and Operational Processes and Must Offer Obligations for Variable Output DR; however, the Council reserves the right to comment on other aspects of the ESDER 4 initiative in the future. In addition, by virtue of commenting on the CAISO's ELCC analysis, this does not indicate the Council's agreement that ELCC is an appropriate methodology to be applied to demand response (DR) resources for several reasons.

1. **Default Energy Bid for Storage Resources**

   The Council reserves comment on this issue.

2. **End-of-Hour Charge Parameter(s)**

   The Council reserves comment on this issue.

3. **Variable-Output DR**

The Council remains concerned about the efficacy of developing a single or even a handful of representative DR Effective Load Carrying Capability (ELCC) values with any degree of accuracy.

An ELCC analysis, regardless of how robust it is, risks providing false precision due to the significant variability among DR types. E3's analysis has not yet considered third-party DR in the form of Demand Response Auction Mechanism (DRAM) resources, bilateral Resource Adequacy contracts between DR providers and non-IOU LSEs, or DR resources contracted with the IOUs to meet a portion of the energy storage procurement target, which will greatly complicate the effort. Though IOU DR programs are relatively static, many third-party DR resources are not, so there will always be a lag in the relevance of an ELCC analysis involving third-party DR.

As the Council stated in its prior comments, any ELCC value is sure to over-value some DR resources and under-value others. This threatens to cause a downward spiral of performance and supply of DR resources if the best performing DR is consistently under-valued. This would incentivize the use of poorer performing, overvalued DR over better performing DR. The poorer performing DR would then push the ELCC factor down and further incentive the elimination of any under-valued DR. The CAISO should seriously consider the implications of this on the supply of DR in California

The E3 presentation was interesting in that it appeared to provide different potential approaches to developing a DR ELCC methodology. However, the complexity surrounding the question of how to incorporate DR ELCC into the CPUC's existing RA framework is overly complicated. The CAISO should carefully consider whether the effort and resources required to bring DR ELCC to fruition is warranted by the relatively small proportion of the overall resource portfolio that DR represents now and the even smaller portion forecasted by E3 in the future. On Slide 13, E3 forecasted very minor DR growth between now and 2030 (a few hundred MWs) but 24,000+ MW of additional solar and 11,000+ MW of additional energy storage. Based on E3's forecast, with peak load forecasted to grow from 49 GW to 53 GW during this time, this indicates a significantly lower proportion of capacity needs will likely be met by DR in the future. Therefore, it is not clear that this issue should be a priority at this time.

4. **Additional comments**

In Section 5.2.2 of the Draft Final Proposal, the CAISO would require that Proxy Demand Resources that utilize the Maximum Daily Run Time Parameter would be required to have a minimum 1 MW curtailment capability and a Pmax that is equal to or greater than 1 MW. This provision had been included in the Second Revised Straw Proposal but the Council admittedly overlooked it. This requirement would be highly problematic for DR providers, including IOUs, because it is sometimes difficult to create a 1 MW resource. For example, a DR provider may be unable to enroll a sufficient number of customers within a subLAP to provide the minimum 1 MW of load reduction. In addition, DRPs will often group their customers with comparable opportunity costs, notification times, and/or willingness to dispatch. If the CAISO adopts this provision, it could cause DR providers and IOUs to "strand" those participants that would otherwise be grouped into a sub-1 MW resource.

The CAISO's basis for proposing this minimum requirement is the load placed on its market systems by the 800+ registered PDRs. However, the CAISO has not indicated what impact this minimum requirement is expected to have on the number of registered PDRs. Furthermore, the CAISO may not be taking into account the likelihood of significantly more registered PDRs in the near future. With rules governing third-party DR being finalized in the current Resource Adequacy proceeding and based on the number of DR providers that recently submitted DR load impact evaluations to the Energy Division for Qualifying Capacity valuation of their DR resources, it seems clear that the number of PDRs will only grow as DRPs begin contracting with more non-IOU LSEs. Therefore, a more sustainable approach might be for the CAISO to upgrade its

systems to accommodate more PDRs. In the short-term, the CAISO should not adopt its proposed 1 MW minimum load curtailment requirement for PDRs utilizing the Maximum Daily Run Time Parameter.