Stakeholder Comments Template

Energy Storage and Distributed Energy Resources (ESDER) Phase 4

This template has been created for submission of stakeholder comments on the Issue Paper for ESDER Phase 4 that was published on Feb 6, 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 Feb 27, 2019.

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<tr>
<th>Submitted by</th>
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Please provide your organization’s comments on the following issues and questions.

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

Please state your organization’s position as described in the Issue Paper:

**Real-Time State of Charge Management**

Boston Energy is supportive of the ISO evaluating ways to improve a scheduling coordinators ability to manage a NGR resource’s state of charge (SOC) in real-time. In previous comments submitted in ESDER Phase 2 Boston Energy discussed the potential for some type of real-time SOC parameter and allowing an MGR to submit multi-point ancillary services bids. The ability for a SC to provide the real-time market an hourly and/or end of day real-time SOC target value is worth exploring in more detail.

That said, if the CAISO ultimately decides to incorporate real-time SOC parameters into its NGR model, the use of such parameters should be optional. Boston Energy wouldn’t support a market change that would require NGR’s to have their real-time state of charged managed solely by the CAISO’s dispatch software.

**Effects of Multi-Interval Optimization**

Boston Energy has experienced the situation described in the issue paper from time to time, but not to the point where we feel changing the bid cost recovery or the CAISO
multi-interval optimization horizon logic is warranted at this time. Further, this issue is not just a NGR issue as we could see situations where non-NGR resource could get into similar situations if future prices don’t materialize. If the CAISO decides to look into this issue further Boston Energy believes any changes would need to apply to non-NGR resources as well.

**NGR Participation Agreements**

Boston Energy has no specific comment on the proposal by the CAISO to allow NGR's to participate under a PGA, but in general supports efforts to reduce administrative burden and improve efficiency.

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

Boston Energy strongly supports measures to ensure wholesale prices for energy and ancillary services are just and reasonable. With respect to Energy Storage resources, Boston Energy has urged the ISO in the Storage as Transmission Asset (SATA) stakeholder process, CAISO require SATA resources to offer at the penalty price levels or offer at or above a default energy bid level. Such requirements are essential to ensure that SATA resources don’t inappropriately suppress market prices.

For traditional NGR energy storage resources, that don’t receive cost recovery through a utility rate base mechanism, the need for market power mitigation measures is unclear at this point in time. If the ISO decides further discussion is warranted, Boston Energy encourages the ISO clearly define the problem the ISO sees with the current design and why it feels market power mitigation is needed.

Any discussion on market power mitigation rules needs to allocate sufficient time to discuss how a default energy bid would determine given the traditional method of using an index fuel price is not relevant. Many variables/parameters go into optimizing a NGR resource in the CAISO market and ample time needs to be allotted to for discussion to avoid situations of over-mitigation and default energy bids that don’t represent a NGR’s operational constraints.

Further, any discussion regarding extending market power mitigation to energy storage NGR’s should be expanded to proxy demand response resource given the expected use of the proxy demand response model as a means to allow energy storage resource to participate in the ISO markets.

3. **Demand Response resources**

Please state your organization’s position as described in the Issue Paper: (Support / Support with Caveats / Oppose)

Boston Energy has no comment at this time.

If you support with caveats or oppose, please further explain your position and include examples:
4. **Multiple-Use Applications (MUA)**

Please state your organization's position as described in the Issue Paper: **(Support / Support with Caveats / Oppose)**

Boston Energy strongly supports discussions on how the ISO market rules can be augmented to incorporate the MUA framework adopted by the CPUC.

If you support with caveat or oppose, please further explain your position and include examples:

5. **Additional comments**

Please offer any other feedback your organization would like to provide on the Draft Final Proposal.

At its December 2018 board meeting CAISO highlighted areas where it would like to enhance its market design to enhance the viability of flexible resources. The CAISO board meeting highlighted specific initiatives such as (1) frequency response product, (2) enhancements to the pay for performance regulation product, (3) development of a day-ahead flexible ramping product, and (4) refinements to flexible resource adequacy rules. All these market initiatives are critically important to allow energy storage resource to meet their full potential in the ISO market and for the market to receive all the benefits energy storage resources can provide to the ever changing grid. Boston Energy would like to see these initiatives fast tracked and given a higher priority than is currently assigned by the ISO.