Stakeholder Comments Template

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<tr>
<th>Submitted by</th>
<th>Company</th>
<th>Date Submitted</th>
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<tbody>
<tr>
<td>Mona Tierney-Lloyd (<a href="mailto:mtierney-lloyd@enernoc.com">mtierney-lloyd@enernoc.com</a>) Jennifer Chamberlin (<a href="mailto:Jennifer.Chamberlin@cpowerenergymanagement.com">Jennifer.Chamberlin@cpowerenergymanagement.com</a>) 925-890-9174 Erika Diamond (<a href="mailto:diamond@energyhub.net">diamond@energyhub.net</a>)</td>
<td>Joint Demand Response Parties (EnerNOC, CPower, EnergyHub)</td>
<td>3/7/2018</td>
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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:**

- 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?

Unexpected RUC awards have been an issue for DR resources as part of DRAM integration into the wholesale market. The problem has been that some of the attributes in the master file do not correlate with DR resources very well. The Joint DR Parties appreciate that the CAISO recognizes these difficulties and is presenting constructive potential remedies.

These proposals are a significant improvement for DR resources who want and are able to participate in the real time, but can not respond in 2.5 minutes, and we support moving forward with addressing implementation details associated with them. However we do not believe this fully addresses all RUC issues and issues associated with infeasible dispatch in real time. It is not sufficient for many longer start DR resources to notify day ahead that a dispatch could occur – but to provide actual dispatch in the real time.

Additionally, while DR is modeled as a resource whose Pmin is zero, for many aggregations the PMin and PMax are actually the same. The resource isn’t idling at PMin the way a generator would be. While there is some “ramping” of DR resources from their “normal” state of consuming energy to their “dispatch” state by reducing consumption within the dispatch notification timeframe, DR does not idle at some minimum state of readiness as a generator does. It is difficult to ascribe a value to this “interim” state for DR, which, for a generator, is between a black start and moving toward full deployment. We probably need to discuss this issue further.

As it relates to “start-up” costs, there are some difficulties associated with this concept as well. Again, we appreciate providing DR resources with options to describe the value of our resource for dispatch readiness and for actual dispatch. For DR the start-up costs may vary based upon the operational schedule of the customer, the time of the year, etc. For example, if a customer is behind in making widgets for shipment to its customers, a 2-hour curtailment could have very large curtailment costs versus a time
when the plant is caught up on orders. In addition, the duration of the dispatch has variable costs for a 1 or 2 hour deployment versus a 5 or 6 hour deployment. Shorter deployment may still give the customer the ability to ramp up to meet its production schedule; but, longer dispatches may not. Because of the variability of the start-up costs, it makes it difficult to quantify. This is something that has been expressed previously for use limited resources and opportunity costs; but, the Joint DR Parties felt that it was important to convey the difficulty of estimating these costs and, perhaps, substantiating them if they come under scrutiny.

Utilizing HASP intertie rules for DR is a good first step, but the Joint DR Parties think additional discussion is needed to fully address the infeasible dispatch issues in ESDER 3.

- 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?

The Joint DR Parties support this proposal – both removal of the DLA and the inclusion of the NBT bidding rule to allow the removal of the single LSE aggregation requirement. As CCAs proliferate over the next year and into the future – allowing an aggregation to remain intact even with customers shifting LSEs will be critical to the integrity of DR resources and their availability to the market.

- 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?

The Joint DR Parties can appreciate the desire to focus a load shift product narrowly for simplicity sake, but continue to advocate that multiple resources – not just storage can fill this role. At a minimum the next iteration of this product should be scoped and a timeline laid out. As it stands the proposal should also consider how customer cites participating will have their demand charges set under their existing tariffs by load shift. How can rate impacts be minimized?

- 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?

No comments at this time.
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:**
   
   No Comments at this time.

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:**
   
   No Comments at this time.

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

   **Comments:**
   
   The Joint DR Parties were very disappointed at the removal of weather-sensitive DR from the issues list for ESDER 3. This topic area had received significant support and is an important component of many potential DR resources in CA. We believe this process is the appropriate place to delve into the issues facing weather sensitive DR – to evaluate what is needed so a comprehensive consensus proposal could be made to the CPUCs RA proceeding, preferably before Phase 3. We ask the CAISO to reconsider eliminating this issue area.