Stakeholder Comments Template

<table>
<thead>
<tr>
<th>Submitted by</th>
<th>Company</th>
<th>Date Submitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barbara R. Barkovich</td>
<td>California Large Energy Consumers Association</td>
<td>August 11, 2016</td>
</tr>
<tr>
<td>Barkovich &amp; Yap, Inc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>707 937-6203</td>
<td></td>
<td></td>
</tr>
<tr>
<td><a href="mailto:Barbara@barkovichandyap.com">Barbara@barkovichandyap.com</a></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please use this template to provide your comments on the ESDER Phase 2 stakeholder initiative Revised Straw Proposal posted on July 21 and as supplemented by the presentation and discussion during the stakeholder web conference held on July 28.

Submit comments to InitiativeComments@CAISO.com

Comments are due August 11, 2016 by 5:00pm

The Revised Straw Proposal posted on July 21 and the presentation discussed during the July 28 stakeholder web conference may be found on the ESDER Phase 2 webpage.

Please provide your comments on the Revised Straw Proposal topics listed below and any additional comments you wish to provide using this template.

**NGR enhancements**

The CAISO has been focused on two areas of potential NGR enhancement: (1) representing use limitations in the NGR model and (2) representing throughput limitations based on a resource’s state of charge (SOC).

The CAISO is requesting stakeholders provide comments in each of these two areas.

Comments:
The California Large Energy Consumers Association (CLECA) supports representing use limitations in the NGR model. However, CLECA also believes that there should be some consistency of treatment of use limitations for storage in the NGR model and in the PDR model. The latter is being addressed in the Commitment Cost Enhancement 3 stakeholder process.

**Demand response enhancements**

Two stakeholder-led work groups are up and running within ESDER 2 to explore two areas of potential demand response enhancement:

- Baseline Analysis Working Group – Explore additional baselines to assess the performance of PDR when application of the current approved 10-in-10 baseline methodology is sufficiently inaccurate. The Working Group has completed its first phase of analysis on topics including alternative baselines and control groups.

- Load Consumption Working Group – Explore the ability for PDR to consume load based on an ISO dispatch, including the ability for PDR to provide regulation service. The working group has recommended bi-directional PDR modelling.

The CAISO is requesting stakeholders provide comments in each of these two areas.

**Comments:**

CLECA is very encouraged by the work of the Baseline Analysis Working Group (BAWG). While the BAWG has not yet provided a set of recommendations for additional baselines, the consultant’s analytical work has shown that certain types of baselines can provide better representations of PDR performance than others, including the current CAISO 10-in-10 baseline with a 20% day-of adjustment. CLECA is also encouraged by the analysis of the use of control groups to estimate baselines for temperature-sensitive loads and supports further development of this option. With respect to RDWR, CLECA finds that during a period of reliability need, the use of a control group would reduce the resources available to meet the reliability need. Under these circumstances, a baseline alternative to a control group would allow the resource to be fully used, better serving the reliability need.

It is also important that the CAISO and the CPUC work together on development of additional baselines, so that the resource adequacy (RA) value of PDR or RDWR is not calculated differently by the two organizations for RA counting purposes.

As for the Load Consumption Working Group (LCWG), CLECA supports the development of a load increasing resource option and further assessment of whether the current (or future) baseline(s) can indeed be used in reverse to determine the load increase for settlement
purposes. For now, CLECA can support the LCWG’s conclusion that a product for load shifting that involves both load increases and decreases creates challenges between wholesale and retail market participation that may indeed be best addressed through retail rate design. Certainly, load shifting provides a partial solution to increasing ramping needs with further renewable penetration and should be supported through appropriate rate design at the retail level.

The use of bi-directional PDR modeling will be essential for PDR to be able to provide regulation. The option of netting energy appears to provide the simplest option for energy settlement for PDR providing regulation. Where netting is not preferred, CLECA believes more work needs to be done to address baselines for energy settlement issues.

**Multiple-use applications**

The ISO has not yet identified specific MUA issues or topics that require treatment in ESDER 2. The ISO proposes to continue its collaboration with the CPUC in this topic area through Track 2 of the CPUC’s energy storage proceeding (CPUC Rulemaking 15-03-011). If an issue is identified that should be addressed within ESDER 2 the ISO can amend the scope and develop a response. The ISO is requesting stakeholders provide comments on this topic area as well as this proposed approach.

**Comments:**

CLECA supports the CAISO’s continued collaboration with the CPUC through Track 2 of the CPUC’s energy storage proceeding. If necessary, appropriate issues can be brought into ESDER, once identified.

**Distinction between charging energy and station power**

In this topic area the ISO will continue its collaboration with the CPUC through Track 2 of the CPUC’s energy storage proceeding (CPUC Rulemaking 15-03-011) rather than exclusively through ESDER 2. At this time, the ISO proposes the following:

- Revise the ISO tariff definition of station power to exclude explicitly charging energy (and any associated efficiency losses); and
- Revise its tariff later to be consistent with IOU tariffs, as needed, in the event that they revise their station power rates.

The CAISO is requesting stakeholders provide comments on this proposed approach. The CAISO also seeks comments on the following:
- What rules are necessary, if any, to dictate how station power and wholesale charging energy (including efficiency losses) can be separately calculated for settlement purposes? For example, what would be the advantages and disadvantages of using meters compared to predetermined deductions?

- Assuming that station power includes all energy drawn from the grid except to charge the storage device, what specific advantages and disadvantages do storage devices have compared to conventional generators under current netting and self-supply rules?

Detailed examples comparing the generally expected dispatching of storage devices and conventional generators under current netting and self-supply rules are appreciated.

**Comments:**

CLECA has no comments at this time.

**Other comments**

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

**Comments:**

[insert comments here]