Stakeholder Comments Template

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<th>Submitted by</th>
<th>Company</th>
<th>Date Submitted</th>
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<tr>
<td>Steven Kelly</td>
<td>IEP</td>
<td>August 18, 2015</td>
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<td>Policy Director</td>
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<td>916-448-9499</td>
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<td><a href="mailto:Steven@iepa.com">Steven@iepa.com</a></td>
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Please use this template to provide your comments on the Issue Paper and Straw Proposal posted on July 30, 2015 and as supplemented by the presentation and discussion during the stakeholder web conference held on August 6, 2015.

Submit comments to InitiativeComments@caiso.com

Comments are due August 18, 2015 by 5:00pm

All documents for the energy storage and distributed energy resources (ESDER) initiative, including the July 30, 2015 Issue Paper and Straw Proposal and the presentation discussed during the August 6, 2015 stakeholder web conference, are available on the webpage for the ESDER initiative at:
http://www.caiso.com/informed/Pages/StakeholderProcesses/EnergyStorage_AggregatedDistributedEnergyResources.aspx

**Non-generator resources (NGR) enhancements**

Please provide your comments in each of the four areas of proposed NGR enhancement.

1. Update documentation on NGR to capture material and clarifications compiled for April education forums.

Comments:

IEP has no comments regarding NGR enhancement at this time.
2. Clarify how ISO uses state of charge (SOC) in market optimization.

Comments:
IEP has no comments regarding NGR enhancement at this time.

3. Evaluate initial SOC as a submitted parameter in the day-ahead market.

Comments:
IEP has no comments regarding NGR enhancement at this time.

4. Evaluate option to not provide energy limits or have the ISO co-optimize an NGR based on state of charge.

Comments:
IEP has no comments regarding NGR enhancement at this time.

PDR/RDRR enhancements – alternative baseline methodologies

Please provide your comments in each of the two areas of proposed enhancement.

1. Develop meter generator output (MGO) as a new ISO baseline methodology.

Comments:
IEP supports requiring the use of actual metered generator output (MGO) as the basis by which demand response is integrated into CAISO wholesale markets. IEP is opposed to using statistical sampling or other estimation techniques for integrating demand response into CAISO wholesale markets. While we support the CAISO’s proposed principles of accuracy, auditability, ease of implementation, and compliance with NASESB standards, these principles are best satisfied by requiring actual metered output from demand response resources integrated into wholesale markets. These principles should not be compromised to allow the use of estimation techniques (in any form), rather than the requirement for actual metered output.

2. Develop additional detail regarding the “ISO Type 2” baseline methodology (i.e., provision of statistically derived meter data) and document that in the appropriate BPMs.

Comments:
As noted above, IEP opposes the use of statistically driven data or any other type of estimation technique as a replacement for applying actual metered data.

**Non-resource adequacy multiple use applications**

Please provide your comments on each of the two non-RA scenarios the ISO has proposed to address.

Also, the ISO strongly encourages stakeholders to *identify and describe use cases* under each scenario (including diagrams of the configurations contemplated for these use cases), and specific issues not covered in these scenarios that should be addressed in this initiative.

The concept of non-RA multiple use applications raises a host of questions and concerns. The CAISO should address the policy parameters (“principles”) around which it proposes to formulate and thereby enable multiple use applications for energy storage and distributed resources (ESDER). IEP offers the following principles to guide the design and implementation of the ESDER program:

- **Clear Lines of Jurisdiction Between Federal and State Jurisdiction; Between Retail and Wholesale; Between Distribution and Transmission.**
- **Products/Services Should Be Measurable/Verifiable.**
- **Comparable Treatment of Resources Integrated into CAISO markets, including Equivalent Standards of Transparency and Accountability.**
- **No Double-counting and/or Double-compensation for the same Products/Services.**
- **Comparable Penalties for Non-Performance.**

Before addressing how to best manage the integration of energy storage and distributed resources, the CAISO should address upfront, early in the ESDER stakeholder process, the fundamental principles against which the integration of distributed resources will be implemented and judged. Clarity on these fundamental design elements now may minimize the risk of litigation and delay in the future.

1. **Type 1:** Resource provides services to the distribution system and participates in the ISO market. Question 1 – How do we manage conflicting real-time needs or dispatches by the distribution utility and the ISO? Question 2 – If distribution system and ISO needs are aligned, and the resource’s actions meet the needs of both, is there a concern about the resource being paid twice for the same performance? Under what situations is double payment a concern?
How should we address this concern? Question 3 – Should any restrictions be on a DER aggregation or the sub-resources of a DER aggregation providing distribution-level services? Would the distribution utility ever call upon a multi-pricing node DER aggregation to address a local distribution problem?

Comments:

Clear lines of jurisdiction between federal and state jurisdiction, between retail and wholesale, and between distribution and transmission need to be established at the beginning of the stakeholder process to determine how energy storage and distributed resources will be integrated into CAISO wholesale markets. Once the jurisdictional lines are established, then priorities need to be determined to govern whether distribution utilities or the CAISO has the initial right to use the product or service. Finally, double-compensation for the same product/services should be prohibited.

2. Type 2: Resource provides services to end-use customers and participates in the ISO market. The ISO has identified the following three sub-types (are there others?): (a) DER installed behind the customer meter, such that flow across the customer meter is always net load; (b) DER installed behind customer meter, such that flow across the customer meter can be net load or net injection at different time; and (c) DER installed on the utility side of the meter, may provide service to end-use customers and participate in wholesale market.

Comments:

Retail products and services are excluded from wholesale markets. To the extent that a resource provides retail services to end-use customers, then that resource is ineligible for participation in the CAISO’s wholesale market. To the extent that a energy storage and distributed energy resource provides products/services in wholesale markets, then the resource must meet the registration, metering, and tariff obligations imposed on all participants in wholesale markets, including performance obligations.