

## Stakeholder Comments Template

| Submitted by  | Company                                      | Date Submitted  |
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Please use this template to provide your comments on the presentation and discussion from the stakeholder meeting held on August 13, 2014.

Submit comments to [EnergyStorage@caiso.com](mailto:EnergyStorage@caiso.com)

[Comments are due August 20, 2014 by 5:00pm](#)

The presentation discussed during the August 13, 2014 stakeholder meeting may be found at:

<http://www.caiso.com/Documents/AgendaPresentation-EnergyStorageInterconnection.pdf>

Please provide your comments in each of the topic areas listed below.

### ***Applying the GIDAP to Cluster 7 energy storage projects***

The ISO invites stakeholders to comment on the framework developed under existing GIDAP rules for accommodating Queue Cluster 7 energy storage interconnection requests (see slide 7 and slides 11-18) and its future application to subsequent queue clusters.

#### **Comments:**

CESA generally applauds the CAISO's framework and believes it represents a significant step forward in providing a fair and transparent interconnection process for energy storage resources. CESA does, however, have concerns with a few aspects of the framework.

**Slide 13:** CESA recognizes that the issue of rate applicability is out of scope in the Energy Storage Interconnection initiative. However, CESA is concerned with the potential concept conveyed on this slide of demand charges imposed on wholesale energy storage projects. While the slide is ambiguous with respect to intent as well as the venue for determining the intended approach for energy storage, CESA believes it to be important that the charging of energy storage devices for wholesale market functions not receive distorted price signals versus discharging, nor should wholesale storage subsidize end use load by paying demand charges or other retail rate components.

**Slide 16:** CESA appreciates the CAISO's clarifications around the reliability study scenarios for energy storage charging. The CAISO indicates that the "worst case" scenario – either peak or partial peak – will be studied based on a determination of the specific circumstances of a proposed energy storage facility. CESA appreciates that the goal of reliability studies is to typically study worst case impact of generators, but CESA is concerned about the ambiguity about how this determination will be made. CESA recommends that the CAISO clearly articulate the process by which a determination will be made. The CAISO should also notify interconnection customers of a proposed determination prior to the Phase I scoping meeting in order to allow the interconnection customer an opportunity for discussion (or to dispute the determination).

CESA also believes the CAISO's example of storage providing regulation is inaccurate. Providing regulation does not necessarily mean a generator is likely to charge during the peak hours; regulation can be provided by varying the discharge in response to CAISO dispatch instructions – and in fact, this is exactly how conventional generators provide such service. It is highly unlikely that resources won't have enough energy to provide these services during peak periods without charging, particularly for energy storage projects that are fully deliverable.

### **Are changes to the GIDAP needed?**

Given the framework developed under existing GIDAP rules for accommodating energy storage interconnection requests (i.e., without requiring modification to the GIDAP tariff), the ISO invites stakeholders to comment on whether changes to the GIDAP tariff are still needed. Stakeholders are asked to be specific and describe any changes they believe are needed despite this framework and explain why they are needed. (see slide 9)

#### **Comments:**

In light of the clarifications the CAISO has made thus far in this stakeholder initiative, CESA agrees that the interconnection process (as narrowly defined in this stakeholder initiative) likely does not require tariff changes to accommodate energy storage.

CESA believes the key area that requires tariff changes are around the deliverability study process (see below). Clarifications to enable holistic wholesale market functionality of both discharging and charging may also be required, although it is yet unclear whether such clarifications would require CAISO tariff changes, CPUC guidance, and/or FERC guidance.

CESA encourages the CAISO to – as a matter of urgency – enter into a dialogue with the CPUC to seek resolution to this issue as well as many other energy storage policy issues<sup>1</sup> that require the involvement of both the CPUC and the CAISO, and to do so in a manner that is transparent to stakeholders.

### **Resource Adequacy**

The ISO invites stakeholders to comment on whether they favor “unbundling” flexible capacity from system/local capacity as a means of facilitating energy storage in California and explain why or why not. (see slides 22-30)

#### **Comments:**

CESA supports unbundling flexible capacity from system/local capacity for two key reasons.

First, flexible capacity is intended to address a completely different system need than system and local capacity are intended to address. Second, the relative need for each product is likely to change over time as the system generation, load, and net load profile changes. Allowing load serving entities to procure only what they need of each capacity product – and allowing pricing to be independently set based on the relative supply and demand of each – would better serve the reliability of the grid and the cost effective procurement of capacity resources.

Further, CESA supports developing a flexible capacity study process during the interconnection process that would evaluate the ability of resources to meet the spring partial peak system needs and result in a ‘flexible deliverability status’ and effective flexible capacity value tied to the system’s ability to support those specific needs. Flexible Deliverability would be a separate status from Full Capacity Deliverability (which is actually a Peak Deliverability status); in other words, a resource seeking deliverability could seek one or both of Flex Deliverability and Peak Deliverability.

### **Is a “charging deliverability assessment” needed?**

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<sup>1</sup> Such as the energy storage interconnection issues identified by the CPUC in Appendix B to ALJ Bushey’s July 29, 2014 Rule 21 (R.11-09-011) ruling (<http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M099/K767/99767928.PDF>)

The ISO invites stakeholders to comment on whether a test is needed to ensure that a storage resource is able to fully charge during each 24-hour day in order to be able to discharge to provide its full RA value. If you believe such a test is needed, how would you propose such a test be performed? Please be specific. (see slide 31)

**Comments:**

CESA does not support a charging deliverability study specific to grid-charged energy storage resources, because to do so would unfairly burden energy storage resources to pay for network upgrades to obtain a level of fuel availability that no other generation resource must obtain. This would artificially make network upgrades for an energy storage resource look more expensive than, for example, a natural gas plant which is not required to provide the same guaranteed level of fuel availability.

**Other issues**

The ISO invites stakeholders to comment on any other issues within the scope of this energy storage interconnection initiative.

**Comments:**

CESA believes the issue of dual use assets – resources that provide a T&D deferral or system reliability function as well as a wholesale market function – is still a significant open question and barrier to the cost effective deployment of energy storage. The CAISO previously committed to addressing the dual use issue as part of the Reliability Services Initiative. RSI, however does not appear to be addressing this issue, so the dual use question remains an issue without an accepted venue for resolution. CESA requests that the CAISO identify a path to address the regulatory barriers and operational framework to enable dual use assets.

It is our understanding that PG&E is currently piloting such an approach at Vaca-Dixon through using the pilot battery system there to provide a distribution reliability function during some periods and a market function at other times. CESA recommends that the CAISO use this pilot as a learning experience to inform future policy and operational framework.