

Stakeholder Comments Template

Submitted by	Company	Date Submitted
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Please use this template to provide your comments on the discussion from the Energy Storage and Distributed Energy Resources Phase 3 stakeholder call at the California ISO on October 12, 2017.

Submit comments to initiativecomments@CAISO.com

Comments are due October 18, 2017 by 5:00pm Pacific time



Please provide your comments on the topics listed below from the Issue Paper presentation discussed during the October 12 stakeholder call, as well as any additional comments you wish to provide using this template.

1. Please provide comments on whether your organization supports or opposes the Demand Response proposal item, as well as the reasons why.

We do support the demand response proposal generally, and as a home energy management platform, our Connected Savings offering is of necessity a primarily weather sensitive load resource. Weather sensitive loads drive system peaks, both winter and summer, and it is therefore reasonable to consider how to harness the emerging capacity of the smart home as a peak resource. The key is to recognize the unique characteristics of the resource in the design of the market so that loads and particularly aggregations of loads are able to be compensated appropriately and fairly, and they system operator has visibility

into the true capacity, when it is most needed. Residential and other weather sensitive load resources are variable, but they are also very reliable and predictable. (Summer loads are correlated with solar radiation, for example, just like rooftop solar, as we witnessed during the solar eclipse.) They are a limited duration product, but they are also flexible. (Unlike large industrial loads, for example, they can be called more often, and even twice in a given day if given time to recharge.)

ESDER II did a great job addressing the need for additional baseline methodologies that better reflect these characteristics and accurately reflect the true behavior of such loads. In Phase III we would like to see stakeholders adopt a solution that allows utilities and third-party DRPs to use non-participant control groups, which at least some of the utilities had previously been able to do. This will improve the economics of residential load participation (which should be reflected in the prices offered).

The CPUC, as part of its decision in the recently concluded phase of its resource adequacy proceeding, and in response to stakeholder interest, called for creation of a weather sensitive loads working group. As we noted in the discussion on October 12, there is a policy component to the market design challenge represented by these resources, which is appropriately addressed by the CPUC process. But it is important that this process be harmonized with the work of the ESDER III stakeholder process, and so we support the recognition by the ESDER stakeholders that ongoing coordination should be part of this next phase of our discussions at CAISO as well.

We support any reasonable effort to expand the size of the zone over which load resources could be aggregated into a single resource. In every market across the country where resources are forced to aggregate to a minimum scale within relatively small geographical areas, this presents a market entry barrier for our emerging technology-enabled resource.

Finally, while we appreciate the reasons for narrowing the focus of the load-consuming demand response (or bi-directional DR) to address the potential for better incorporating energy storage, we would urge the stakeholders and CAISO to include thermal storage within the scope of this exploration. Not only is traditional thermal storage still very valuable, but significant additional capacity is available, and with the right incentive structure could provide local and flexible resources as well as systemwide support, again, associated with peak loads. In fact, while we are discovering how best to incorporate the evolving capabilities of connected homes and smart buildings, it may be that is useful to see the weather sensitive loads such as HVAC controls as thermal storage resources. Weather sensitive load resources are charging when power is plentiful, cheap and clean (cooling the thermal mass of buildings if not separate thermal storage units in summer, or heating it in winter) and discharging when called upon to reduce local or systemwide demand (allowing the cooled thermal mass to absorb the heat of summer peak for a period, or discharging

heat into the space in winter.) Because we are not yet clear how best to address the potential of weather sensitive loads, it is important that the option to consider it as a form of storage resource not be foreclosed before this exploration can unfold.

2. Please provide comments on whether your organization supports or opposes the Multiple-Use Applications proposal item, as well as the reasons why.

No comments at this time

3. Please provide comments on whether your organization supports or opposes the Non-Generator Resource proposal item, as well as the reasons why.

No comments at this time

4. Please provide additional comments, if any, from the discussion.

No comments at this time