



Stakeholder Comments Template

Hybrid Resources Initiative: Straw Proposal

This template has been created for submission of stakeholder comments on the **Hybrid Resources Initiative, Second Revised Straw Proposal** that was held on May 7, 2020. The meeting material and other information related to this initiative may be found on the initiative webpage at:

<http://www.caiso.com/informed/Pages/StakeholderProcesses/HybridResources.aspx>

Upon completion of this template, please submit it to initiativecomments@caiso.com. Submissions are requested by close of business on May 28, 2020.

Submitted by	Organization	Date Submitted
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Please provide your organization's comments on the following topics and indicate your organization's position on the topics below (Support, Support with caveats, Oppose, or Oppose with caveats). Please provide examples and support for your positions in your responses as applicable.

1. Terms and Definitions

Please provide your organization's feedback on the proposed terminology and definitions as described in the revised straw proposal.

WPTF is concerned that the definitions for "co-located" and "hybrid" resources are based on the idea of a single coordinator and only two potential resource IDs behind a single Point of Interconnection. For example, under the CAISO's definition of co-located, this could encompass two "hybrid" resources operated by separate scheduling coordinators and contracted with separate load serving entities. The implication of this is that a load-serving entity may contract to set up their two resources as a hybrid (single resource ID), but end up being considered co-located by the CAISO. This does not seem to enable clean contracting and easy market participation. WPTF encourages the CAISO to continue to refine these definitions.

2. Market Interaction for Hybrid Resources

Please provide your organization's feedback on the market interaction for hybrid resources proposal, as described within the second revised straw proposal.

WPTF supports the CAISO proposal to allow a scheduling coordinator-provided, optional, 5-minute dynamic limiting tool based on forecast. It is unclear why the CAISO is able to provide this limiting option that includes ancillary services for hybrids, but not for co-located resources.

Additionally, WPTF asks in the next paper iteration that in an appendix, that the CAISO provide an example Masterfile template for hybrid resources in order to provide an example of resource constraints for hybrids. One point of confusion is whether a hybrid resource will be allowed to have a Pmax that exceeds the POI or how the CAISO will limit the Pmaxs to the POI if there are two hybrids behind a POI operated by separate scheduling coordinators.

3. Point-of-Interconnection (POI) Constraint for Co-Located Resources

Please provide your organization's feedback on the POI constraint for co-located resources proposal, as described within the second revised straw proposal.

WPTF supports the CAISO decision to remove the single SC rule behind a POI and appreciates the CAISO's quick decision to publish an addendum.

It should be acknowledged that the CAISO has allowed thousands of MWs to be interconnected in a manner where the aggregate maximum output of the resources far exceed the POI. This combined with the large number of load-serving entities means that both initially and increasingly over time, it is likely these resources will be contracted to different load-serving entities with different scheduling coordinators. In this circumstance, the co-located constraint will force resources to compete against each other for their own presumed-purchased interconnection availability. This may need to be addressed contractually, but at a minimum the CAISO should provide as much transparency as possible via examples and training into order to ensure market participants are aware of the implications of this proposal.

Generally, WPTF supports the co-located constraint, but also asks that the CAISO consider the broader implications with stakeholders prior to taking this to the Board. For example, WPTF asks the CAISO to provide a pricing example on how the co-located constraint will work in practice, including where the CAISO is assuming each Pnode. It is unclear to WPTF whether behind the POI congestion should be included in the nodal LMP and even if the CAISO will allow separate Pnodes by resource ID.

4. Metering

Please provide your organization's feedback on the metering topic, as described within the second revised straw proposal.

WPTF supports the CAISO's metering proposal.

5. Resource Adequacy

Please provide your organization's position on the Resource Adequacy topic, as described in the second revised straw proposal.

WPTF does not fully understand the CAISO's proposed must-offer obligation and outage card proposal for co-located resources or hybrid resources and asks that the next draft provide additional explanation. For example, the CAISO states that a 100 MW interconnection with a 100 MW solar resource and 50 MW battery will have a 66 MW must-offer obligation. We assume this is due to the additive RA of the solar and battery, but this is not explicitly stated. It also is unclear whether this is a proposal for how the CAISO will calculate default hybrid counting rules or just an example. Additionally, it is confusing that the first paragraph on page 17 says the resource will not need to put in an outage card, but the example in the second paragraph says the resource will need to put in an outage card.

Additional comments

Please offer any other feedback your organization would like to provide on the Hybrid Resources Initiative.