



Comments on Hybrid Resource Draft Final Proposal

Initiative: Hybrid resources

Comment period

Aug 10, 2020, 12:00 pm - Aug 26, 2020, 05:00 pm

Submitting organizations

California Energy Storage Alliance

California Energy Storage Alliance

Submitted on 08/26/2020, 04:38 pm

Contact

Alexander Morris

Executive Director

California Energy Storage Alliance (CESA)

amorris@storagealliance.org

1. Please provide your organization's overall position on the Hybrid Resources draft final proposal:

Support with caveats

2. Provide a summary of your organization's comments on this proposal:

CESA supports and appreciates the ISO's efforts to provide clarity and certainty regarding the market integration of hybrid and co-located resources. With this initiative, the ISO has positioned itself as a nation-wide leader on the subject. In general terms, CESA is supportive of this initiative's intent; nevertheless, CESA is also concerned with the following elements of this initiative:

The interaction of this initiative's proposal to use outage cards to signal unavailability as it relates to the CPUC's Resource Adequacy (RA) Program, as well as the ISO's RA Enhancements Initiative.

The modeling of VER-based hybrids with marginal amounts of energy storage and no intention to use grid charging.

The determination of treating all co-located storage deviations from dispatch as UIE.

The prohibition to co-located storage devices from deviating from dispatch when providing ancillary services.

The potential limitation of regulation and ancillary service awards to hybrid resources.

3. Provide your organization’s feedback on the market interaction for hybrid resources proposal, as described in the draft final proposal:

In Section 4.1, the ISO states that on-site charging is a feature that many hybrid resources have asked for, but comments that this feature inherently reduces the availability of a hybrid resource for dispatch from the ISO market.^[1] Further, the ISO notes that this reduction in dispatch capability must be captured in outage cards, submitted to the ISO through the ISO’s outage management system.^[2] As explained further below, CESA requests that the ISO reevaluate the use of outage cards to account for the charging behavior of hybrid resources as it could lead to a double penalization based on the CPUC QC rules for hybrid resources.

^[1] Proposal, at 8.

^[2] *Ibid.*

4. Provide your organization’s feedback on the forecasting and dynamic limits proposal, as described in the draft final proposal:

CESA is supportive, with caveats, of the ISO’s forecasting and dynamic limits proposal. CESA appreciates the ISO’s work to make forecasting tools available to hybrid resources. Furthermore, CESA agrees with the need for a tool that allows the ISO to use forecasts in order to ensure dispatch instructions sent to hybrid assets are actually feasible. Nevertheless, CESA believes one core modification must be made within this section.

In Section 4.3, the ISO states that most, but not all, hybrid resources will be modeled as a non-generator resource (NGR).^[1] The ISO goes on to state that modelling and interconnection requirements will be tailored to each interconnection request, using a gas-powered hybrid as an example for a hybrid resource modeled as a generator instead of an NGR.^[2] This same logic should be applied for VERs that add marginal amounts of energy storage to normalize or stabilize their output. In these cases, the ISO must model these resources as hybrids under the VER model, assigning them eligible intermittent resource (EIR) or participating intermittent resource (PIR) status. This modification is necessary and useful, as it will address a potential use case where VER-based hybrids that do not seek to charge from the grid can still participate and provide grid value.

^[1] Proposal, at 11.

^[2] *Ibid.*

5. Provide your organization’s feedback on the proposal to enhance the aggregate capability constraint for co-located resources, as described within the draft final proposal:

CESA offers no comments at this time.

6. Provide your organization’s feedback on the proposal to allow co-located storage

resources to deviate from dispatch instructions to allow for offsetting VER variation, as described within the draft final proposal:

CESA supports the spirit of this modification, as it allows further operational flexibility and it could potentially maximize the utilization of renewable energy within the ISO's footprint. While supportive of the inclusion of this topic in the Draft Final Proposal, CESA is concerned with the ISO's intent to consider any deviation as uninstructed imbalance energy (UIE), thus attributing it flexible ramping charges. This treatment is contrary to the one currently applied to standalone VERs. Currently, variations from dispatch from VER resources are not considered UIE. In this sense, the ISO's proposal here is inconsistent with the net impact of co-located storage deviation. If a solar or wind standalone asset deviates from its forecasted dispatch, this is not considered UIE because the usage of renewable energy has been maximized. In the case encompassed by this proposal, the net effect is the same: the storage modifies its behavior downward in order to maximize grid usage of renewable assets. In this sense, CESA considers it would be both counterproductive and contradictory to consider storage deviations as UIE without modifying the treatment of the same behavior for standalone VERs. Thus, CESA urges the ISO to revise this proposal and either exempt co-located storage deviations from UIE treatment until the settlement process modifications are done to ensure a netted settlement can be applied, or treat standalone VER deviations in the same manner, as UIE.

Moreover, CESA is concerned with the ISO's blanket prohibition of utilizing this feature when the co-located storage asset is providing ancillary services. It is clear that some ancillary services could be affected if a storage resource opts to use this feature; nevertheless, it is not reasonable to completely prohibit this case, as different types of ancillary services would be more or less compatible with this feature depending on the situation. As such, CESA urges the ISO to revisit this assumption.

7. Provide your organization's feedback on the metering topic, as described within the draft final proposal:

CESA offers no comments at this time.

8. Provide your organization's feedback on the ancillary services proposal, as described within the draft final proposal:

CESA urges the ISO to address issues related to the provision of regulation by hybrid resources. During the stakeholder call on August 10, stakeholders mentioned some hybrid assets have been unable to provide regulation due to the visibility of VER generation relative to the potential of on-site storage. In effect, the storage component of hybrid resources may be limited in its full ability to provide ancillary services due to the VER component in the market. CESA requests that these issues be addressed before all co-located and hybrid resources are eligible to provide ancillary services.

9. Provide your organization's feedback on the resource adequacy topic, as described in the

draft final proposal:

CESA opposes the use of outage cards within this section of the proposal as it could lead to a double penalization for hybrid resources. In the Draft Final Proposal, the ISO considers two ways to capture the variability of hybrid resources. First, to account for the charging behavior of the energy storage component and the hours of low or zero solar generation, hybrid resources will submit outage cards in the day-ahead (DA) market. Second, to account for the intra-hour variance of solar generation, hybrid resources will be subject to a dynamic limit tool in the real-time (RT) market, derived in part from the VER's high sustainable limit. CESA agrees with the latter; nevertheless, the use of outage cards requires further consideration in the context of the CPUC's hybrid resource QC methodology and the changes to the RA structure contemplated within the ISO's RA Enhancements Initiative.

As currently drafted, the Draft Final Proposal expects to capture part of the variability of hybrid resources via outage cards. This approach could potentially hinder the UCAP value of hybrid resources due to the use of outage cards during hours where the on-site generation is set to charge on-site storage. The ISO should reevaluate this method due to its potential to derate hybrid capacity twice for the same charging behavior. This use of outage cards, as well as its potential UCAP consequences, may be duplicative of the California Public Utilities Commission's (CPUC) determination on the qualifying capacity (QC) of hybrid assets, since charging considerations have already been incorporated in the CPUC's methodology via a derate of the effective load carrying capability (ELCC) of the on-site VERs. Moreover, that UCAP evaluation hours are not known by asset owners and operators *a priori*, thus increasing said risk. As such, the method contained in the Draft Final Proposal should be reconsidered as it does represent an unfair discount valuation of the reliability contributions of hybrid resources.

10. Provide any additional comments on the draft final proposal for the Hybrid Resources initiative:

CESA offers no additional comments at this time.