



Stakeholder Comments Template

Hybrid Resources Initiative: Straw Proposal

This template has been created for submission of stakeholder comments on the **Hybrid Resources Initiative, Revised Straw Proposal** that was held on December 17, 2019. 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 January 14, 2019.

Submitted by	Organization	Date Submitted
Irene Moosen, 415-587-7343	California Community Choice Association ¹	January 14, 2020

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.

CalCCA supports CAISO's proposed updated definition of Hybrid Resource:

"A resource type comprised of a mixed-fuel type project, or a combination of multiple different generation technologies that are physically and electronically controlled by a single owner/operator and Scheduling Coordinator behind a single point of interconnection ("POI") that participates in the CAISO markets as a single resource with a single market resource ID."

CalCCA supports CAISO's proposal to require that Hybrid Resources meet the minimum sizing requirements for both of the underlying generation components: 500kw for any participating generator hybrid resource component and 100kw for any storage

hybrid resource components. CalCCA suggests, however, that there may be circumstances that warrant deviations from these amounts and that CAISO should grant waivers in instances when it would not be unduly burdensome for CAISO to accommodate them.

CalCCA supports CAISO's proposal to treat Co-located Resources (i.e., projects with two or more resource IDs with a common point of interconnection) as distinct resources for purposes of market participation, with the exception of coordination of dispatch and operations to limit output to the project's interconnection rights, and with the ability to track the use of co-located storage by the co-located VERS and described further in the metering and telemetry section.

2. Forecasting

Please provide your organization's feedback on the forecasting topic as described in the straw proposal.

CalCCA supports CAISO's proposal to provide forecasting for Variable Energy Resource (VER) component of both Co-located and Hybrid Resources. CalCCA appreciates CAISO's responsiveness to stakeholders' request that CAISO offer forecasting services for the VER component of Hybrid Resources.

3. Markets and Systems

Please provide your organization's feedback on the markets and systems topic as described in the revised straw proposal.

CalCCA requests that the ability to change a VERS bid closer to real time be applied to the VERS Hybrid resource in the same manner as now applies to colocated VERS resources. CalCCA is concerned that not allowing a Hybrid VERS forecast to be updated closer to real time in the same manner as colocated VERS resources (with two resource IDs) unfairly burdens the Hybrid resource with higher risk of deviations. When CAISO introduced the 15 minute market and improved the timing of 5-minute forecasts for VERS in its FERC 764 initiative, it actually made a huge improvement to forecasting for VERS. What is being proposed by CAISO here for Hybrid resources could be a step back.

CalCCA supports CAISO's clarification in Table 2 that the storage associated with both hybrid resources and co-located resources will be able to have the storage charged from i. the on-site generation, ii. charged from the grid via bids and CAISO dispatch, or iii. charged from both on-site generation and the grid via bids and CAISO dispatch.

CalCCA supports the CAISO proposal to develop a new interconnection rights constraint that ensures co-located resources' outputs remain less than or equal to the co-located project's maximum POI injection rights without stranding capacity from either of the co-located resource IDs. CalCCA supports CAISO's plan to implement this

functionality for energy market participation by Fall 2020, and for ancillary services market participation by Fall 2021, with the option for resource owners desiring to participate in ancillary service markets prior to Fall 2021 to either limit their combined Pmax to the total interconnection rights or to select the hybrid resource option.

4. Ancillary Services

Please provide your organization's feedback on the ancillary services topic as described in the revised straw proposal.

CalCCA supports the use of the 5-minute VER forecast to determine the High Sustainable Limit (i.e., the maximum output capability of the VER component of a hybrid resource) for the VER portion of Hybrid Resources. This can then be used in conjunction with the storage resource state of charge and charging/discharging status to determine the A/S potential for Hybrid Resources.

5. Metering and Telemetry

Please provide your organization's feedback on the metering and telemetry topic as described in the revised straw proposal.

CalCCA appreciates the CAISO's proposal to allow for an additional metering configuration to mitigate potential settlements impacts and concerns regarding ITC eligibility and other undesirable financial impacts for co-located resources by requiring a third meter be installed for these co-located resources that wish to select the option to charge from on-site generation. The CAISO will use the three associated meters to perform logical metering calculations that will reflect the fact that the co-located storage resource is charging from on-site generation. During the December 17 stakeholder meeting, some parties noted that it should be possible to perform the described logical metering calculations with only two meters. CalCCA supports exploring both approaches in case resource owners determine it is not necessary to install three meters to maintain ITC eligibility.

CalCCA seeks confirmation from CAISO that gas hybrid resources would have the option to install multiple meters to facilitate tracking of the emissions reduction benefits associated with utilization of the hybrid resource components. These hybrid resources could facilitate significant GHG emissions reductions while supporting reliable grid operations and it is important that the benefits be documented.

CalCCA reiterates its request that CAISO continue to facilitate certification of DC meters to provide the greatest amount of flexibility and enhanced visibility of the various components of Hybrid Resources and Co-located Resources.

6. Resource Adequacy

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

CalCCA supports the CAISO proposal to apply the current counting rules for the individual components of co-located resources with a common POI. For co-located resources whose aggregate components exceed the POI rights, CalCCA supports the CAISO working with resource interconnection customers to split and limit the component QC values to ensure the POI limits are not exceeded.

CalCCA opposes CAISO's proposal to adopt the interim QC methodology for hybrid resources in the CPUC Proposed Decision that would limit the QC to the greater of the individual component resources' QC. CAISO's previous proposal to sum the individual component resource QCs would better reflect the expected contribution of hybrid resources. As an initial matter, the CPUC Proposed Decision has not yet been adopted. As CalCCA noted in its comments to the CPUC, the Proposed Decision's approach is uninformed by a full exploration of reasonable alternatives, lacks the clarity necessary for successful implementation and risks shortchanging the value of hybrid resources.¹ Devaluing hybrid resources to a very conservative solution without adequate exploration of alternatives, particularly at a time when these resources are increasingly viewed as the key strategy for system reliability, would be counterproductive. The proposed methodology would effectively eliminate the resource adequacy (RA) value of either the Variable Energy Resource component or the storage component of hybrid resources for portions of the year. This would present a significant barrier for LSEs seeking to urgently develop these resources in line with near-term needs identified by the Commission in D.19-11-021. Unless and until CAISO performs analysis demonstrating the detrimental impacts on expected capacity due to interactions between hybrid resource components, it should stick with its previous proposal to sum the component resource QCs. At most, the "greater of" approach should only be applied to hybrid resources that require the associated storage be charged exclusively from the paired renewable resource to obtain the ITC.

Additional comments

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

¹ COMMENTS OF CALIFORNIA COMMUNITY CHOICE ASSOCIATION ON PROPOSED DECISION GRANTING MOTION REGARDING QUALIFYING CAPACITY VALUE OF HYBRID RESOURCES WITH MODIFICATIONS found here: <https://cal-cca.org/wp-content/uploads/2019/12/R.17-09-020-CalCCA-Comments-on-Proposed-Decision-Granting-Motion.pdf>