



**Comments of the
California Energy Storage Alliance (CESA)
on the August 27, 2019 Hybrid Resources Technical Working
Group Meeting**

Submitted by	Organization	Date Submitted
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Please provide your organization’s comments on the following issues and questions.

CESA appreciates the CAISO’s working group meeting which provided updates and clarifications regarding metering, meteorological data, and electrical single-line configurations for both energy settlement and performance as well as RPS tracking for solar plus storage ‘hybrid’ systems in various resource ID and AC vs DC configurations.

CESA looks forward to the CAISO’s further definition and exploration of likely ‘use cases’ for hybrid resources. Information and ‘mapping’ of such use-cases and related electrical, scheduling, and metering and settlement configurations that, based on the CAISO’s expertise, are potential or optimal configurations for hybrid resources seeking some outcomes, e.g. RPS ITC capture, will be extremely helpful to energy storage developers while also ensure most developers line up projects poised to work effectively with CAISO interfaces, models, etc. That said, the CAISO should continue to explore how barriers or key issues or incentives must be shaped through market design.

CESA also appreciates the CAISO’s consideration of how RPS tracking rules pursuant to the CEC RPS Eligibility Handbook may evolve such that storage losses from hybrid resources charged with RPS solar may, at some point, not be counted against RPS output. CESA observes that the CEC may have important jurisdictional input on this topic, but the CAISO’s work should anticipate changes. CESA and members have identified this issue as one to be considered in the upcoming and likely imminent RPS eligibility

handbook update. Should the CEC change its approach, the CAISO will need to have models that reflect any new or different approaches. Beyond the logical reasons for removing storage losses from hybrid solar plus storage RPS – which include cost-savings, equal treatment with storage charging ‘just downstream’ of a stand alone RPS resource, and considerations that remote solar facilities with more losses count the same for RPS as proximal resources with fewer transmission losses – CESA also notes that such activities may be supported by load-serving entities seeking to procure useful renewable resources and to pursue cost-savings associated with hybrid configurations. CESA thus expects there may be more support for such an approach than just from the solar plus storage developer communities.

Issues with DC coupled systems should be anticipated. Many systems may increasingly choose to leverage DC-coupled hybrid resources. Such configurations will need appropriate rules. The use of Scheduling-Coordinator Metered Entities (SCME) as the sole approach for DC-coupled systems is workable for now, but considerations of any wrinkles or unique needs for DC-coupled systems are appropriate.

Finally, CESA strongly supports the CAISO considering approaches whereby ‘better behaving PIRs’, namely PIRs with small storage and enmeshed operations, are not unduly disadvantaged when compared to stand-alone PIRs. The CAISO should strongly consider how PIR settlement treatment could apply in some form or fashion to hybridized PIR resources so to encourage such better-behaving resources. Such an approach will support reliability and encourage development of resources that are more useful for the CAISO than stand-alone PIRs.

CESA looks forward to the upcoming straw proposal and ongoing evolution of and enhancements to approaches for market participation and interconnection for hybrid resources.