

California Community Choice Association

SUBMITTED 04/04/2022, 02:01 PM

Contact

Shawn-Dai Linderman (shawndai@cal-cca.org)

1. Please provide a summary of your organization's general comments on the revised straw proposal presentation for this initiative:

The California Community Choice Association (CalCCA) appreciates the opportunity to comment on the Energy Storage Enhancements Revised Straw Proposal (Revised Straw Proposal). In these comments, CalCCA recommends:

- Adopting the California Independent System Operator (CAISO) proposed model that allows storage operators manage state-of-charge (SOC) and reflect other operating characteristics; CalCCA requests clarification on how bids would be submitted in the day-ahead market considering the initial SOC is unknown;
- Adopting a robust market power mitigation mechanism for storage resources operating under the energy storage resource (ESR) model;
- The CAISO clarify its ancillary service proposal would only apply to resources using the non-generator resource (NGR) model, not the ESR model, to the extent necessary to satisfy their award;
- The CAISO further explain the rationale behind the time horizon proposed to calculate the counterfactuals used to establish the opportunity costs associated with exceptional dispatches (EDs) to hold SOC; a different lookout period, such as 24 hours or all hours of the day following the ED, may be more appropriate given every increment of state of charge is dependent on the previous state of charge;
- The CAISO consider the use of the proposed tools for local areas and their impact on market prices in the Transmission Planning Process (TPP) when evaluating whether or not to approve transmission upgrades that would alleviate local area constraints and reduce reliance on the use of this tool; and
- The CAISO expand its co-located enhancements proposal to allow the functionality to apply to all co-located resources, legacy or new resources, that are eligible for the Investment Tax Credit (ITC) and property tax benefits regardless of when the contract was executed relative to CAISO's proposal.

2. Provide your organization's comments on the proposed energy storage resource model, as described in the revised straw proposal:

CalCCA generally supports a model that would allow storage resource operators to manage SOC and reflect other operating characteristics but is concerned the ESR model would make it difficult to construct bids into the day-ahead market given the initial SOC going into the day would not be known when bids are submitted. CalCCA requests clarification or an example on how bids would be constructed for day-ahead, given the

SOC going into the first hour of the day will not be known when bids are submitted at 10 a.m. the day prior. This is especially important; how the resources bid will likely depend on the SOC of the resources at a defined starting point, which could vary significantly from the time bids are submitted for day-ahead to the beginning of the day.

CalCCA supports requests by stakeholders on the call for the CAISO to provide more examples that explain how the CAISO will model variable ramp rates.

With respect to the CAISO's proposal on market power mitigation, CalCCA supports a robust market power mitigation mechanism for storage resources operating under the ESR model. The CAISO's proposed methodology generally includes the correct set of costs for storage to buy energy, cycling costs, and real-time opportunity costs. In the next iteration of the proposal, the CAISO should consider what happens if the mitigated bids to discharge are below the bids to charge, given the ESR model will have separate bids to charge and discharge.

3. Provide your organization's comments on the proposed reliability enhancements for storage resources, as described in the revised straw proposal:

Ancillary Services

CalCCA understands why this proposal would be useful to CAISO operators when operating storage resources using the NGR model. However, this is likely not applicable to resources using the ESR model because the resources can bid SOC to ensure they can meet their AS awards. The CAISO should clarify this proposal would only apply to resources using the NGR model. The CAISO should also clarify in its proposal that to the extent necessary to satisfy their award, the storage must provide an energy bid with its ancillary service award. Storage resources may be situated in real-time in such a way that they can meet their AS award without requiring energy bids. For example, if a storage resource with a maximum capacity (P_{max}) of 100 megawatts (MW) receives a 5 MW regulation up-award and the resource is operating at 80 MW, then the energy bid to charge is not needed to ensure the resource can deliver on their ancillary service award. On the other hand, if the same resource receives a 200 MW ancillary service award, then the resource would need energy bids from -100MW to 100 MW (i.e., charge and discharge bids) to deliver on its ancillary service award. In this case, the CAISO does not need to enforce this requirement.

Exceptional Dispatch

CalCCA supports the CAISO implementing new functionality to allow operators to ED storage resources to hold SOC and compensating storage exceptionally dispatched to hold SOC using an opportunity cost methodology. CalCCA requests the CAISO further explain the rationale behind the time horizon proposed to calculate the counterfactuals used to establish the opportunity costs, which is currently the length of the ED plus the duration of the battery. A different lookout period, such as 24 hours or all hours of the day following the ED, may be more appropriate given every how a resource would choose to bid each increment of SOC is dependent on the previous SOC.

Tools for Local Areas

CalCCA does not oppose the CAISO's proposal to schedule energy storage resources in day-ahead through the market when operators identify challenging constraints in local areas. The CAISO should, however, consider the use of these tools and their impact on market prices in the TPP when evaluating whether or not to approve transmission upgrades that would alleviate local area constraints and reduce reliance on the use of this tool.

4. Provide your organization's comments on the proposed co-located enhancements, as described in the revised straw proposal:

Co-Located Enhancements

CalCCA appreciates the CAISO taking steps to enhance the ability of co-located resources to utilize solely on-site renewables to charge storage to take full advantage of the ITC. CalCCA supports the proposed selectable functionality to limit dispatch instructions, so they are no greater than the forecast of the co-located renewable. However, CalCCA opposes the CAISO's proposal to limit this functionality to resources that have contractual ITC implications or property tax implications in place prior to this policy being implemented. The CAISO must expand its proposal to allow the functionality to apply to all co-located resources, legacy or new resources, that are eligible for the ITC and property tax benefits regardless of when the contract was executed relative to CAISO's proposal. This functionality should extend for the length of the ITC or property tax benefit eligibility, rather than being limited to five years. Resources unavailable due to grid charging restrictions should be required to submit outage cards but the outage should be exempt from RAIM if the outage is due to charging restrictions and the inability to charge from onsite renewable.

The CAISO should not develop a policy that would require asking one federal agency (Federal Energy Regulatory Commission) to approve a policy that would directly contradict that of another. The ITC is a federal benefit offered by the Internal Revenue Service to incentivize pairing storage with renewable resources. The CAISO must not implement policies that contradict federal programs or diminish market participants' ability to take full advantage of them. The ITC is a federal benefit that could potentially extend beyond its current five-year timeframe in the future. The CAISO's proposal would create an unnecessary roadblock to market participants looking to participate under the co-located configuration, which by design is meant to allow for a more flexible utilization of the battery. Therefore, the CAISO must extend this selectable functionality to all resources eligible for the ITC.

A significant reason so many storage resources are being developed is that they can be financed using ITC and receive property tax benefits. The CAISO should avoid policies that would stand in the way of developing these resources, especially during a time when the state needs to procure significant amounts of new capacity to meet procurement orders and support grid reliability. CalCCA understands the CAISO intends to be able to fully utilize the battery component of co-located resources, above their

renewable output, through grid charging. This must only occur after the phaseout of ITC and property tax benefits. Only applying this functionality to existing resources with contracts signed before Energy Storage Enhancements implementation (*i.e.*, 2023) creates both uncertainty and new challenges for co-located resources coming to market, since new resources will have uncertainty around the ITC it can expect to receive.

Further, while the CAISO states its proposal, “should incentivize owners to bid more charging capability into the market, as charging would always be compensated, including incidental costs from grid charging,”^[1] compensation through the CAISO market cannot offset foregone ITC payments. While it may be possible to reflect some of these costs through bids prior to reaching the 25 percent threshold, as the CAISO outlines in its proposal, storage is not eligible for ITC at all if the percentage of charging that occurs via the grid rather than the onsite renewable exceeds 25 percent. These costs significantly exceed those that can be reflected through bids. This is exacerbated by the foregone property tax benefits that are lost by any amount of grid charging.

Finally, CalCCA requests clarification on the process by which market participants would have the ability to request the functionality be added or removed. CalCCA understands that the New Resource Implementation (NRI) process can take a considerable amount of time, and if the process for adding or removing this functionality is similar to the NRI process, it may impact decisions around which model (hybrid or co-located) to use.

Optimized Curtailment of Co-Located Resources

CalCCA supports the comments from Clean Power Alliance (CPA) submitted to the Revised Straw Proposal regarding the curtailment of co-located resources. CPA’s proposal would adjust curtailment orders on co-located resources so that renewables can continue to charge on-site batteries as scheduled, rather than having the renewable resource curtailed such that the storage cannot fully charge. Given co-located resources are prevented from charging from the grid, when the CAISO issues a curtailment instruction, the resource can curtail such that it provides 0 MW of export onto the grid but should be able to produce energy such that it can continue to charge the storage component. Curtailing the renewable resource further such that it provides no energy to the grid and also cannot fully charge the battery would only result in the CAISO having less energy available from the storage component to dispatch at a later time.

^[1] Revised Straw Proposal at 23.

5. Provide your organization’s comments on the proposed WEIM classification for this initiative, as described in the revised straw proposal:

CalCCA has no comments at this time.

6. Attachments

CalCCA has no comments at this time.