

Energy Storage and Distributed Energy Resources Phase 4 - Stakeholder Comments

Submitted by	Company	Date Submitted
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Southern California Edison (SCE) offers the following comments on the California Independent System Operator's (CAISO) Energy Storage and Distributed Energy Resources Phase 4 (ESDER 4) Issue Paper¹.

SCE prioritizes the following items as the highest

Storage resource market power mitigation (MPM) – Given the increasing participation of storage resources in the market, SCE agrees with the CAISO that there is a need for MPM measures. Further, with the CAISO consideration of bid cost recovery (BCR) provisions under multi-interval optimization, the most likely scenario is an increase in BCR. This underscores the importance of implementing MPM for storage.

However, the first step is a storage resource's ability to contribute the most to the market – supply at the higher prices and charge at the lower ones. Effectively, the opportunity cost. Hence, the system should look to maximize a resource's opportunity cost, subject to the constraint that the resource's actual cost is at least covered by the opportunity cost, for all combinations of supply/charge price pairs.

With the opportunity cost greater than or equal to the actual cost constraint, the determination of the Default Energy Bid (DEB) is the next step toward allowing implementation of a MPM mechanism. A storage resource can contribute to congestion management while charging and discharging and has the potential to engage in physical withholding when charging and discharging. Therefore, this aspect of its participation in the market warrants consideration. The CAISO should address these matters within this initiative.

¹ <http://www.caiso.com/Documents/IssuePaper-EnergyStorage-DistributedEnergyResourcesPhase4.pdf>

Multiple-Use Applications (MUA) – Given the specificity of the eleven adopted rules in the California Public Utilities Commission (CPUC) decision, it is important that the CAISO work with stakeholders to formulate actionable market rules that allow DERs to meaningfully provide multiple reliability services based upon assessment of the potential for conflicts in need/use.

Operational characteristics and Weather-sensitive Demand Response (DR) – SCE thanks the CAISO for continuing the exploration of these topics from ESDER 3. SCE supports prioritizing these items and specifically requests that the CAISO also consider exploring maximum daily run time as a resource characteristic that would allow DR to better represent limitations.

SCE supports the CAISO in improving efficiency through streamlined participation

SCE supports Non Generator Resources (NGR) participating solely through the Participating Generator Agreement (PGA).

The CAISO should explore additional items

SCE believes there is merit to exploring additional items that are listed as potentials. Specifically, Real Time State of Charge (RT SOC) management should be explored. This is key to storage participation in Resource Adequacy (RA) and the CAISO should support this aspect.