

## Stakeholder Comments

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8minute Solar Energy thanks the ISO for an open and transparent process and detailed technical work presented by ISO staff. We would like to submit this document with comments related to the topic of battery modeling in PCM.

The proposal that was presented during the TPP meeting in September related to depth of discharge makes incorrect assumptions with respect to how the plants are actually being contracted and designed. When 8minute signs a contract to deliver a 100MW, 4-hour battery, we handle all of the depth of discharge and degradation issues internally such that the battery will deliver its rated duration and capacity according to the contract. Therefore, we urge the ISO to model the battery system at its full advertised capacity and not using heuristic modeling assumptions to down-rate the power and duration of the battery.

Regarding the operational costs, we are unclear as to why the ISO needs to make assumptions with respect to the operational or replacement costs. The scheduling coordinator bidding to the market integrates these marginal costs to the bid and submits the bid accordingly. Are the operational costs needed to detect market manipulation or for another purpose?

Finally, 8minute has observed that there are currently at least three different working groups (TPP, ESDER4, Hybrid Resources) working on energy storage technology and operations. We would like the ISO to consolidate this work under one working group if possible to reduce administrative and participation overhead and to increase visibility.