Comments on Day-Ahead Market Enhancements Configurable Parameters Implementation Working Group – Oct 21, 2025

Department of Market Monitoring

November 4, 2025

Summary

The Department of Market Monitoring (DMM) appreciates the opportunity to comment on the *Day-Ahead Market Enhancements - Configurable Parameters Implementation Working Group*.[1] DMM supports the ISO testing the sensitivity of the configurable parameters on market results prior to go-live, but recommends that any results using unrealistic market data be interpreted with caution.

The ISO's analysis highlights the sensitivity of imbalance reserve procurement and cost to envelope multiplier values and imbalance reserve bids. For future analysis, DMM recommends the ISO analyze the impact of the envelope multiplier on battery performance in the real-time, provide additional information on the amount of available imbalance reserve capacity, and assess imbalance reserve (IR) procurement with an hourly time horizon. DMM understands that some of this analysis may not be possible until after go-live and continues to recommend the ISO gain actual operational experience before discussing changes to the $55 IR demand curve cap, IR bid cap, or 85% envelope multiplier.[2]

Comments

The ISO conducted sensitivity analysis of the 85% envelope multiplier and the $55 imbalance reserve (IR) bid cap. The envelope multiplier is a parameter included in state-of-charge constraints that track the state-of-charge impacts of ancillary service awards. This multiplier defines how much state-of-charge is reserved from a battery that receives an imbalance reserve award. DMM supported the ISO's relatively high initial multiplier value of 85% as a conservative starting point, noting that if testing reveals that this value has detrimental impacts on the overall market, it may be appropriate to lower the multiplier.[3]

The ISO's analysis presented in the working group meeting highlights the potential for higher multipliers to lead to less imbalance reserve up (IRU) awarded to battery resources, and higher IRU prices. DMM recommends that after go-live, the ISO consider assessing the real-time performance batteries awarded IRU under different multiplier values. The multiplier value should balance real-time deliverability of storage capacity without overly constraining IR supply.

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[1] *Day-Ahead Market Enhancements: Configurable Parameters Implementation Working Group,* California ISO, October 21, 2025: https://stakeholdercenter.caiso.com/InitiativeDocuments/Presentation-Day-Ahead-Market-Enhancements-Configurable-Parameters-Implementation-Working-Group-Oct-21-2025.pdf

[2] *Comments on Day-Ahead Market Enhancements Configurable Parameters Implementation Working Group – August 7, 2024,* Department of Market Monitoring, September 4, 2024: https://www.caiso.com/documents/dmm-comments-on-dame-configurable-parameters-aug-07-2024-working-group-sep-04-2024.pdf

[3] *Ibid.*

While DMM supports a conservative starting point for go-live, DMM recommends additional analysis to determine how drastically the envelope multiplier affects the performance of batteries in real-time to ensure the 85% multiplier is not too restrictive and does not create inefficiently high IR prices.

The ISO also conducted sensitivity analysis of the $55 IR bid cap by analyzing the changes in IR procurement and IR prices depending on different sets of IR bid prices. Unsurprisingly, the analysis shows the IR prices increase with higher IR bids. As DMM has previously stated, any consideration of changes to the IR demand curve cap and bid cap should be discussed in a separate policy stakeholder initiative that provides data analysis that would support such a change, and recommends the ISO not propose any changes to the cap on the basis of pre-market testing.[4]

Finally, DMM recommends the ISO conduct analysis to provide insight into whether the 30-minute time horizon is too restrictive. It would be useful to know the amount of uncleared IR bids in addition to the cleared IR capacity.[5] DMM requests that the ISO provide information on the available IR supply under the benchmark scenario. The ISO could also calculate a simplified system-wide residual supply index (RSI) for the IR supply (available within 30-minute ramp constraints from the base case energy schedules). In addition, DMM requests the ISO run the IR procurement with an hourly time horizon as opposed to a 30-minute one.

[4] *Ibid.*

[5] i.e., available eligible IR capacity within 30-minute ramp constraints from the base case energy dispatch in addition to the cleared IR capacity.