

# Memorandum

**To:** ISO Board of Governors and WEIM Governing Body  
**From:** Eric Hildebrandt, Executive Director, Market Monitoring  
**Date:** July 13, 2022  
**Re:** Department of Market Monitoring report

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*This memorandum does not require ISO Board of Governors action.*

## EXECUTIVE SUMMARY

This memo provides comments by the Department of Market Monitoring (DMM) on two sets of rule changes being proposed by ISO Management for approval. DMM supports both sets of proposed changes.

- **Flexible ramping product enhancements.** DMM supports the proposal to not change the current consequences of failing the Western Energy Imbalance Market (WEIM) resource sufficiency tests when the ISO moves forward to implement locational procurement of the flexible ramping product. Any changes to the current consequences of failing the tests should be decided through the ongoing stakeholder process on the resource sufficiency tests. This process allows for more thorough consideration and analysis of a full range of potential changes and improvements to the tests and consequences of failing the tests.
- **Reliability demand response resources.** DMM supports the proposed changes in the market rules and modeling of reliability demand response resources that can only be dispatched in relatively large discrete increments. DMM believes the changes should increase the feasibility of dispatches issued to this type of reliability demand response resources. The changes will also accommodate stakeholder requests to relax size restrictions on these resources while avoiding some potential adverse impacts.

## FLEXIBLE RAMPING PRODUCT ENHANCEMENTS

Management is proposing a relatively small but important change to the set of changes and enhancements developed as part of the *Flexible Ramping Product Refinements* initiative that was approved for filing at FERC in October 2020. Management is not proposing any changes to the main enhancement incorporated in this initiative, which is to model and procure flexible ramping product locationally. The ISO has not yet filed the tariff changes to implement these flexible ramping product refinements but plans to do so in time to implement them in the fall of 2022.

When developing the technical details needed to implement locational procurement of flexible ramping capacity, the ISO included a provision changing the consequences taken when any balancing area in the WEIM fails the resource sufficiency evaluation. Currently, when a balancing area fails a resource sufficiency test, economic energy transfers into the area from the WEIM are limited by the higher of (1) zero and (2) the economic energy transfers prior to the failure. The technical details for implementing locational procurement of flexible ramping product include a provision that would change the current rules so that a balancing authority area's economic transfers from the WEIM would be reduced to zero when the area fails the resource sufficiency evaluation.

Management is now proposing to maintain the current approach for limiting incremental transfers to a balancing authority area that fails the resource sufficiency evaluation test. As explained in Management's memo, as part of recent and ongoing discussions regarding the WEIM resource sufficiency evaluation, there appears to be consensus that reducing economic energy transfers to zero when a balancing authority area fails the resource sufficiency evaluation would cause unacceptable reliability risks. Management is therefore proposing to maintain the current approach for limiting incremental transfers to a balancing authority area that fails the resource sufficiency evaluation test while alternative approaches are being considered.

DMM supports this proposal. Under the current approach incorporated in the technical details for implementing locational procurement of flexible ramping product, a balancing area that fails the test could lose supply from the transfers it was getting while passing the test, potentially creating or worsening a shortage. This loss of transfers will not occur if the current approach is kept in place, as Management is now proposing.

Implementation of the key elements of the October 2020 *Flexible Ramping Product Refinements* proposal – including locational procurement of flexible ramping product – does not require changing the consequences of failing the resource sufficiency evaluation.<sup>1</sup> Any changes to the current consequences of failing the test should be decided through the ongoing stakeholder process on resource sufficiency. This ongoing process allows for more thorough consideration and analysis of a full range of potential changes and improvements.

The resource sufficiency evaluation was adopted at the beginning of the Western Energy Imbalance Market as an incentive for balancing areas to make sufficient capacity available to meet their loads and deter “leaning” on other balancing areas to meet reliability needs, while still allowing economic transfers between areas. As noted in prior DMM comments, further changes to the evaluation ultimately involve important policy decisions about a level of certainty in achieving this goal that is sought by market participants collectively. DMM and many stakeholders have encouraged the development of financial mechanisms that might be used to deter potential “leaning” on other balancing areas, rather than relying on

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<sup>1</sup> *Comments on Flexible Ramping Product Enhancements May 10, 2022 Workshop*, Department of Market Monitoring, May 26, 2022: <http://www.caiso.com/Documents/DMM-Comments-Flexible-Ramping-Product-Enhancements-May-10-Workshop-May-26-2022.pdf>

approaches based on limiting transfers between balancing areas when an area fails a resource sufficiency test.<sup>2</sup>

## **RELIABILITY DEMAND RESPONSE RESOURCES**

DMM supports the proposed changes in the market rules and modeling of reliability demand response resources that can only be dispatched in relatively large discrete increments. DMM believes the changes should increase the feasibility of dispatches issued to reliability demand response resources and relax size restrictions on these resources while avoiding potential adverse impacts.

### **Minimum load modeling**

As described in Management's memo, the first proposed change will automatically adjust the minimum operating limit of discrete dispatch reliability demand response resources to a value just below the resource's load reduction bid into the market for each hour. For example, if a discrete dispatch resource bids 50 MW of energy, the real-time market would model a 49.9 MW minimum load.

With this new approach, the market software will automatically set the minimum load cost bid for the resource based on the energy bid price the scheduling coordinator submitted to the real-time market. This will prevent the market optimization from treating discrete reliability demand response resources as if they were "free" to commit in the market at 0 MW. This will also avoid infeasible dispatches that can currently result when the market software dispatches a discrete resource back-and-forth between 0 MW and the maximum amount of capacity from the resource that is bid into the market.

DMM supports the ISO's proposed approach since it can better reflect the physical capabilities of many of the reliability demand response resources. DMM understands that most, if not all, existing reliability demand response resources covered under this proposal do not have a minimum load level less than the full bid amount. The automatic re-rate proposed by the ISO may reasonably reflect the characteristics of those resources.

### **Maximum size of discrete dispatch resources**

The second proposed change is to increase the maximum allowable size of discrete dispatch reliability demand response resources from 50 MW to 100 MW. This change will allow providers to better reflect the actual size of these resources in the real-time market. Management also proposes to allow discrete dispatch resources larger than 100 MW if the scheduling coordinator attests the resources meet certain criteria and if the ISO determines the resource will not create detrimental market or operational impacts.

DMM supports the ISO's proposal to raise the size cap for registering discrete reliability demand response resources. Stakeholders have indicated that such changes are necessary to accommodate resources that cannot be split into smaller resources. The ISO

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<sup>2</sup> *Comments on EIM Resource Sufficiency Evaluation Enhancements: Emergency Assistance Workshop, March 23, 2022*: Department of Market Monitoring, April 1, 2022: <http://www.caiso.com/Documents/DMM-Comments-WEIM-RSE-Enhancements-Emergency-Assistance-Workshop-Apr-1-2022.pdf>

has acknowledged raising the size cap for reliability demand response resources could increase discrepancies between the dispatch sent to a resource and the market's internal calculations of the resource's expected production. However, DMM agrees with the ISO that these potential impacts will be effectively mitigated by the proposed adjustments to the minimum operating levels and minimum load bid costs, as previously described. Therefore, the proposal should allow the ISO to accommodate stakeholders' requests for larger discrete resource sizes while avoiding potential adverse impacts.