

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

**California Independent System)
Operator Corporation)**

Docket No. ER23-1534-000

**MOTION TO INTERVENE AND COMMENTS
OF THE DEPARTMENT OF MARKET MONITORING
OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

Pursuant to Rules 212 and 214 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (“FERC” or “Commission”), 18 C.F.R. §§385.212, 385.214, the Department of Market Monitoring (“DMM”), acting in its capacity as the Independent Market Monitor for the California Independent System Operator Corporation (“CAISO”), submits this motion to intervene and comment in the above-captioned proceeding.

I. MOTION TO INTERVENE

DMM respectfully requests that the Commission afford due consideration to these comments and motion to intervene, and afford DMM full rights as a party to this proceeding. Pursuant to the Commission’s Order 719, the CAISO tariff states “DMM shall review existing and proposed market rules, tariff provisions, and market design elements and recommend proposed rule and tariff changes to the CAISO, the CAISO Governing Board, FERC staff, the California Public Utilities Commission, Market Participants, and other interested entities.”¹ As this proceeding involves CAISO tariff provisions that would affect the efficiency of CAISO markets, it implicates matters within DMM’s purview.

¹ CAISO Tariff Appendix P, Section 5.1.

II. SUMMARY

In this filing, CAISO proposes tariff revisions originating from its Western Energy Imbalance Market (WEIM) Resource Sufficiency Evaluation Phase 2 stakeholder initiative.² The proposed tariff revisions include: (1) providing an option to allow members of the WEIM to access assistance energy transfers at a fixed surcharge upon failure of the WEIM resource sufficiency evaluation (RSE); (2) excluding the effect of real-time lower priority (LPT) exports from the CAISO balancing area's RSE obligations; and (3) clarifying scheduling and tagging protocols for LPT exports to facilitate operator's ability to manually curtail exports according to their tariff-defined scheduling priorities.³ DMM supports each of CAISO's proposed tariff revisions.

The assistance energy transfer option included in the proposal is a reasonable compromise between potential design elements considered in the stakeholder process. Relative to other options CAISO considered, the total cost of the penalty is scaled much more closely with the degree to which areas may be relying on the WEIM when failing the RSE. While further refinements to this approach should be considered in future initiatives, the relative simplicity of the proposal should allow implementation of this option during summer 2023. Availability of this option represents an incremental improvement to the WEIM RSE design.

² *WEIM Resource Sufficiency Evaluation Enhancements Phase 2 – Second Revised Final Proposal*, California ISO, December 6, 2022:
<http://www.aiso.com/InitiativeDocuments/SecondRevisedFinalProposal-WEIMResourceSufficiencyEvaluationEnhancementsPhase2.pdf>

³ *California Independent System Operator Corporation Tariff Amendment to Implement Phase 2 of Resource Sufficiency Evaluation Enhancements*, California Independent System Operator Corporation, Docket No. ER23-1534-000, ("Transmittal Letter").

The proposal to exclude real-time low priority exports scheduled out of the CAISO balancing area from its RSE requirements will improve how accurately the test reflects actual system requirements during periods of potential resource insufficiency. The clarified export scheduling and tagging protocols should help CAISO balancing area operators implement the tariff-defined prioritization between exports and load.

III. COMMENTS

Assistance energy transfer proposal

The ISO proposes to add an assistance energy transfer program to its existing resource sufficiency evaluation design. Each WEIM balancing area will be able to choose whether or not it will be eligible to receive assistance energy. If an area elects to be eligible for assistance energy, the proposal will change the consequences of that area failing a sufficiency test. Currently, when an area fails the test, WEIM transfers into that area are capped at the previous interval's transfer level. With the proposed changes, an area failing the test could receive additional WEIM transfers needed to meet load. However, instead of paying the locational marginal price for all transfers, an area failing the test would pay an additional out-of-market assistance energy penalty cost for some of the transfers.

The penalty cost will be set at the penalty price for the CAISO and WEIM balancing areas (\$1,000 or \$2,000/MWh). The quantity of transfers into an area subject to this assistance energy penalty cost would be the lesser of (1) the amount by which the area failed an upward WEIM capacity or flexibility test, or (2) dynamic WEIM transfers into the area. The ISO is not proposing to change existing sufficiency test failure consequences for balancing areas that do not elect assistance energy eligibility.

Analysis of assistance energy proposal

Under a prior ISO proposal, the assistance energy penalty cost would have been applied to all of a balancing area's real-time market imbalance energy when that area failed the test. DMM's analysis of this prior proposal showed that applying the assistance energy penalty to all real-time imbalance energy could significantly raise real-time market costs for balancing areas failing the sufficiency tests – even during intervals when an area did not import any additional energy through the WEIM as a result of participating in the assistance energy option.⁴ These results suggested that participation in the assistance energy option under the prior proposal could be extremely limited.

DMM performed similar analysis of the potential cost and energy impacts of the revised proposal on each WEIM balancing area.⁵ This analysis shows the cost impacts of the Revised Final Proposal to be significantly less than the impacts of the ISO's prior proposal. More importantly, DMM believes that with this revised approach, the total cost of the penalty is scaled more closely to the degree to which areas failing the test may be relying on the WEIM to meet their load.

The revised assistance energy approach seems to be a reasonable compromise that could encourage a significant portion WEIM balancing areas to participate in this option. Assuming some WEIM areas participate in this new feature, it represents an

⁴ *Supplemental Comments on WEIM Resource Sufficiency Evaluation Enhancements Phase 2 – Revised Draft Final Proposal*, Department of Market Monitoring, September 27, 2022.
<http://www.caiso.com/Documents/DMM-Comments-WEIM-Resource-Sufficiency-Evaluation-Enhancements-Phase2-Draft-Final-Proposal-Sep-27-2022.pdf>

⁵ *Supplemental Comments on WEIM Resource Sufficiency Evaluation Enhancements Phase 2 - Revised Final Proposal*, Department of Market Monitoring December 1, 2022
<http://www.caiso.com/Documents/DMM-Comments-WEIM-Resource-Sufficiency-Evaluation-Enhancements-Phase2-Revised-Final-Proposal-2022-12-01.pdf>

improvement over the current market design. The relative simplicity of the proposal should allow implementation of this option during summer 2023.

However, DMM encourages the ISO and stakeholders to consider further refinements to this approach. For example, as explained by the Market Surveillance Committee (MSC), there are a variety of further refinements that could better link or scale the *ex post* assistance energy penalty based on actual system conditions inside and outside of areas failing the test.⁶ As noted by the MSC, this could encourage more balancing areas to opt into the feature on an ongoing basis.

Consequences of failing resource sufficiency evaluation

DMM supports the assistance energy proposal as an improvement in the current design. However, DMM continues to recommend that the ISO and stakeholders consider further refinements to the consequences for all balancing areas that fail a sufficiency test. For balancing areas that do not opt into the assistance energy program, the consequence of failing the test will continue to be that WEIM imports are capped at the last interval's transfer level. This may not provide a strong incentive to procure sufficient capacity to meet their forecasted load. In the next phase of this initiative, the ISO should also continue to consider refinements to the consequences for failing the test for areas that do not elect to participate in the assistance energy program.

⁶ *Opinion on Energy Imbalance Market (EIM) Resource Sufficiency Evaluation Enhancements, Phase 2*, Market Surveillance Committee, Revised Draft, December 4, 2022. <http://www.caiso.com/Documents/MSCDraftOpinionResourceSufficiencyEvaluationEnhancementsPhase2.pdf>

Incorporating uncertainty into test requirement

Currently, uncertainty is included in the WEIM flexible ramping test, but is not incorporated in the capacity test. The ISO is not proposing to add uncertainty back into the capacity test at this time. While incorporating some level of uncertainty into the test is reasonable, there is not an objectively correct answer to what this uncertainty adder should be.

On the one hand, increasing the test requirements by adding uncertainty adders will create stronger incentives for WEIM areas to procure more capacity in advance of the real-time market and will reduce the potential for one area to rely on WEIM to meet its load. On the other hand, it would be prohibitively expensive to adopt test requirements designed to ensure that each balancing area can meet its full imbalance requirements 100 percent of the time with just the resources made available to the real-time market in that area. Therefore, the question of how to set an uncertainty adder is a policy question that can only be answered through additional discussion and consensus among the balancing areas participating in the WEIM.

DMM understands that the ISO and many stakeholders believe the quantile regression methodology the ISO has recently implemented for the flexible ramping product requires further assessment before being implemented in the sufficiency tests.⁷ Even after more development, DMM expects the quantile regression adder to fluctuate significantly, interval by interval, making it very difficult for balancing areas to reproduce or predict in advance. Therefore, DMM continues to recommend that the ISO and

⁷ The ISO began using the new quantile regression methodology to calculate the uncertainty component of the flexible ramping product requirement on February 1, 2022.

stakeholders consider developing much simpler and more transparent uncertainty adders in the next phase of this initiative.

Removing low priority exports from CAISO balancing area RSE requirements

The ISO proposes to change how the resource sufficiency evaluation treats low priority exports scheduled out of the CAISO balancing area that may be cut under very tight system conditions. Currently, these low priority exports are included in the requirements that must be met by CAISO balancing area capacity in both the flexibility and capacity tests. Under the ISO's proposal, these low priority exports will only be included in the CAISO balancing area's test requirements if the export has first received an award in the CAISO day-ahead residual unit commitment process, and then proceeds to receive a hour-ahead market schedule.

This change makes the CAISO balancing area's current sufficiency test requirement more reflective of actual system conditions during periods of potential resource insufficiency. The ISO has clarified that the CAISO balancing area would curtail any low priority exports with hour-ahead market awards within the hour when the CAISO area does not have enough resources to meet its load and reserve obligations. Therefore, it seems appropriate to exclude these real-time low priority exports from the exporting area's resource sufficiency test requirements.

However, in situations when the ISO will not curtail an export, it would be extremely inefficient to not allow other WEIM balancing areas to count export schedules out of the CAISO area towards meeting their resource sufficiency evaluation. In practice, the ISO expects to deliver these exports except in rare reliability emergency situations. Not allowing the receiving WEIM balancing areas to count these exports from the CAISO as

supply in their resource sufficiency evaluations would force the receiving WEIM balancing areas to procure other supply instead. This could result in significant inefficiencies when power from the CAISO is less expensive than the alternatives.

The proposed change to the treatment of low priority exports out of the CAISO is a reasonable interim compromise between (1) placing excessive requirements on the CAISO balancing area for exports it ultimately would not deliver in a reliability emergency, and (2) not allowing other WEIM areas to count the exports as capacity that the CAISO area would always deliver except under emergency situations.

This compromise introduces one potential source of inconsistency. LPT exports out of the CAISO balancing area that do not receive residual unit commitment (RUC) awards but do receive hour ahead market awards will not be counted as requirements in the CAISO's tests, but will be counted as supply in receiving WEIM balancing areas' tests. Thus, DMM recommends that in the next phase of this initiative, the ISO seek to develop a policy that would not allow the receiving balancing area to count these exports as supply in their tests during tight system conditions when the CAISO area is at high risk of not delivering the exports, such as during an emergency (EEA) event.

Clarifying scheduling and tagging protocols for low priority exports

The CAISO tariff currently specifies that high priority exports have equal priority to CAISO balancing area native load, and that high priority exports and native load both have higher priority than low priority exports. During the stakeholder process DMM asked the ISO to clarify how it was implementing these prioritizations in practice.⁸ The proposed

⁸ *Comments on RSEE revised draft final proposal*, Department of Market Monitoring, September 16, 2022, pp. 2-3: <https://www.caiso.com/Documents/DMM-Comments-WEIM-Resource-Sufficiency-Evaluation-Enhancements-Phase2-Draft-Final-Proposal-Sep-16-2022.pdf>

clarifications to tagging protocols for low priority exports should help operators identify low priority exports to curtail before high priority exports and CAISO balancing area native load in emergency situations. DMM supports the proposed revisions as enhancements to CAISO's ability to implement the prioritizations defined in the tariff for load, high priority exports, and low priority exports.

IV. CONCLUSION

DMM respectfully requests that the Commission afford due consideration to these comments as it evaluates the proposed tariff provisions before it.

Respectfully submitted,

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Independent Market Monitor for the
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Dated: April 21, 2023

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon the parties listed on the official service lists in the above-referenced proceedings, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Folsom, California this 21st day of April, 2023.

/s/ Ariana Rebancos
Ariana Rebancos