

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

**California Independent System)
Operator Corporation)**

Docket No. ER23-2537-000

**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. SUMMARY

In this filing, CAISO includes two sets of proposed tariff revisions originating from its recently approved Energy Storage Enhancements stakeholder initiative.¹ The tariff revisions proposed in this filing would: (1) extend aggregate capability constraint technology to pseudo-tied resources, and (2) provide biddable parameters that allow storage resources to avoid charging schedules that exceed the scheduled energy output of co-located variable energy resources.²

¹ *Energy Storage Enhancements – Final Proposal*, California ISO, October 27, 2022: <http://www.caiso.com/InitiativeDocuments/FinalProposal-EnergyStorageEnhancements.pdf>

² *California Independent System Operator Corporation Energy Storage Enhancements – Phase 2*, California Independent System Operator Corporation, Docket No. ER23-2537-000, (“Transmittal Letter”).

DMM supports each of the CAISO's proposed tariff revisions as enhancements that will support the continued growth of mixed-fuel resources. While we support the CAISO's proposed tariff revisions, we note that developing a reasonable model for incorporating investment tax credit reductions into bids could be significantly more efficient than allowing the use of a constraint that limits grid charging by co-located storage resources. This approach could represent a long-term solution available to all resources with such limitations now or in the future.

II. COMMENTS

DMM supports the CAISO's proposed constraint to allow co-located storage resources to limit grid charging, but reflecting tax implications in bids would be significantly more efficient.

The CAISO proposes to introduce a storage charging constraint that would limit the charging dispatch instructions of storage resources to the day-ahead and real-time market schedules of one or more co-located variable energy resources. The proposed tariff revisions would also explicitly allow co-located storage resources to deviate from dispatch instructions that conflict with charging constraints, such as when the co-located variable energy resources are unable to produce the forecasted amount. The proposed constraint would not be in place by default, but would be electable through the use of a biddable parameter that impacts the range of the storage resource dispatch in a given hour.

The CAISO proposes these changes to address stakeholder concerns that some co-located storage resources are limited in their ability to charge from the CAISO grid in order to maintain preferential tax treatment. DMM has recommended to the CAISO that the CAISO and stakeholders develop a reasonable model for incorporating the

investment tax credit reductions into bids. This could be significantly more efficient than allowing many co-located resources to constrain themselves to never charge from the grid. This approach could represent a long-term solution available to all resources with such limitations now or in the future.

Incorporating tax incentives into resource energy bids may produce the most efficient outcomes. However, the investment tax credit and property tax issues seem significant enough to discourage storage resource participation, and could even discourage investment in new storage resources, if the CAISO does not acknowledge them as costs or constraints in its dispatch instructions. Therefore, DMM supports the CAISO's proposed revisions to promote resource development and allow some co-located storage resources to avoid charging from the grid.

DMM strongly supports the CAISO's proposal to exclude eligibility to use the charging constraint when resources are providing regulation. The CAISO states in the final iteration of the policy proposal that "the premise of regulating energy is that the automatic generator control can dispatch the resource anywhere within the capacity range awarded for this service. This premise is inconsistent with limitations that could result from a resource not being fully or partially available because of output from on-site renewable generation."³ DMM agrees with this statement. As storage resources provide an increasing volume of ancillary services to the CAISO grid, it is increasingly important to the reliability of the CAISO grid that storage resources are available and physically capable of providing all awarded ancillary services – independent of the output of a co-located variable energy resource.

³ *Energy Storage Enhancements – Final Proposal*, pg.22, California ISO, October 27, 2022: <http://www.caiso.com/InitiativeDocuments/FinalProposal-EnergyStorageEnhancements.pdf>

DMM supports extending the aggregate capability constraint functionality to pseudo-tied resources.

The CAISO proposes to extend the aggregate capability constraint (ACC) functionality to pseudo-tied resources. The ACC appears to be a valuable and effective tool for resources internal to the CAISO balancing area to manage limited interconnection capacity for co-located resources. DMM supports extending this functionality to co-located pseudo-tied resources.

DMM understands that pseudo-tied co-located resources are currently required to show firm transmission for the full generating capability of the co-located resources from the generator interconnection to the CAISO delivery point. DMM further understands that one implication of extending the ACC functionality to pseudo-tied resources is that it would allow the CAISO to relax the requirement of firm transmission for the full generating capacity of the co-located resources. Instead, firm transmission may only be required up to the interconnection limit, i.e., the maximum simultaneous dispatch of the co-located resources.

If extended to pseudo-tied co-located resources, the CAISO could use an aggregate capability constraint (ACC) to ensure that the aggregate market dispatch of the pseudo-tied co-located resources does not exceed the interconnection limits and firm transmission associated with the project. DMM would not oppose this change, which appears to better align firm transmission requirements for co-located resources with generator interconnection limits.

III. 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."⁴ As this proceeding involves CAISO tariff provisions that would affect the efficiency of CAISO markets, it implicates matters within DMM's purview.

Respectfully submitted,

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Independent Market Monitor for the
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Dated: August 22, 2023

⁴ CAISO Tariff Appendix P, Section 5.1.

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 22nd day of August, 2023.

/s/ Aprille Girardot
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