UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

California Independent System Operator Corporation	**Docket No. ER22-2362-____** **Docket No. ER25-1236-____**

MOTION OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FOR EXTENSION OF TIME

I. Introduction

Pursuant to Rules 212 and 2008(a) of the Federal Energy Regulatory Commission's (Commission) Rules of Practice and Procedure,[1] the California Independent System Operator Corporation (CAISO) submits this motion to request a further extension of time to comply with Order No. 881 adopted by the Commission to improve the accuracy and transparency of electric transmission line ratings.[2] Specifically, the CAISO requests an extension of time until April 1, 2027 to implement its Order No. 881 tariff provisions, subject to the CAISO filing a notice with the Commission seven days before the actual effective date. This extension will provide the CAISO with

[1] 18 C.F.R. §§ 385.212 and 385.2008(a). On October 21, 2026, the CAISO filed a motion for an extension of time to comply with Order No. 881 in this docket up to an including December 16, 2027. The CASIO subsequently filed a notice to withdraw that motion to explore a more accelerated implementation schedule requested in this filing and to provide more defined milestones to meet that schedule.

[2] *Managing Transmission Line Ratings* 177 FERC ¶ 61,179 (2021); *Order Addressing Arguments Raised on Rehearing and Clarification,* 179 FERC ¶ 61,125 (Order No. 881-A) (2022). The CAISO refers to these orders in this motion collectively as Order No. 881.

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time necessary to undertake required integration testing of software code to implement Order No. 881 and administer pre-production activities, including market simulation.

The CAISO recognizes the critical importance of advancing efficient operations of the existing transmission system by using more granular seasonal and ambient adjusted transmission line ratings informed by temperature and solar irradiance. The CAISO also recognizes that deploying functionality to integrate hourly transmission line ratings into its markets establishes the foundation to use dynamic line ratings informed by wind speed. To this end, the CAISO and its stakeholders have made considerable progress on implementing key components of Order No. 881. The CAISO has completed two of three implementation tracks and is now working to complete the third track under which it will configure its day-ahead and real-time markets to use hourly transmission line ratings. The CAISO requests this extension of its Order No. 881 compliance date to complete this work.[3]

Consistent with the Commission's prior directives, the CAISO will submit informational filings to report on the status of its implementation activities as well as the implementation of Order No. 881 by CAISO participating transmission owners and other entities participating in the markets the CAISO administers.[4] The CAISO proposes to file these informational reports in January and September 2027.

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[3] Previously, the Commission accepted a request by the CAISO for an extension of time until December 17, 2026 to implement Order No. 881 as well as an extension of time until October 15, 2027 for the CAISO's participating transmission owners to implement their requirements under Order No. 881 or for public utility transmission providers in the Extended Day Ahead Market (EDAM) and Western energy Imbalance Market (WEIM) to submit ratings for use in the day-ahead and real-time markets administered by the CAISO. *California Independent System Operator Corp.,* 191 FERC ¶ 61,095 (2025). This motion requests only an extension of the December 17, 2026 date.

[4] As part of an earlier extension of time granted to the CAISO to implement Oder No.881, the Commission accepted the CAISO's commitment to submit informational reports no later than January 28,

II. Background

Order No. 881 establishes requirements for public utility transmission providers to use ambient adjusted ratings and seasonal ratings in connection with transmission service they offer. In markets administered by regional transmission organizations (RTOs) and independent system operators (ISOs), Order No. 881 requires RTOs/ISOs to implement systems and procedures necessary to allow transmission owners to update transmission line ratings electronically at least hourly. Transmission providers must use uniquely determined emergency ratings for contingency analysis in the operations horizon and in post-contingency simulations of constraints as well as implement specific transparency reforms. In addition to the functions it performs within its balancing authority area, the CAISO serves as the market operator for the EDAM and the WEIM, which provide day-ahead and real-time market services to participants throughout the Western Interconnection. Implementing Order No. 881 includes integrating hourly transmission line ratings into these markets.

The CAISO submitted a filing in July 2022 that proposed tariff revisions to comply with Order No. 881. The Commission accepted the CAISO's Order No. 881 compliance filing, subject to further compliance.[5] In June 2023, the CAISO submitted a filing in further compliance with Order No. 881, which the Commission accepted.[6] The Commission accepted the CAISO's proposal to make its Order No. 881 tariff revisions

2027 and January 28, 2028 to detail the status of Order No. 881 implementation in its balancing authority area as well as in the EDAM and WEIM. *California Independent System Operator Corp.,* 191 FERC ¶ 61,095 (2025) at P 11.

[5] *California Independent System Operator Corp.,* 183 FERC ¶ 61,037 (2023).

[6] *See* Letter order issued December 13, 2023 in docket ER22-2362-001.

effective no later than June 15, 2025, subject to filing a notice of the actual effective date of the tariff revisions within five business days of their implementation. On February 6, 2025, the CAISO submitted a supplemental compliance filing to further clarify its Order No. 881 tariff, which the Commission accepted.[7]

Separately, on January 27, 2025, the CAISO filed a motion for an extension of time from June 15, 2025 until December 17, 2026 to implement the requirements of Order No. 881, which the Commission granted.[8] In support of its motion, the CAISO explained it required more time because of the schedule for development efforts and the scheduled delivery of tools and software code from the CAISO's external vendors. Unfortunately, the CAISO finds itself in the position of having to request additional time to allow for final software development and integration testing.

The CAISO has completed multiple workstreams to support Order No. 881 implementation efforts. This work includes developing the capability to receive hourly ratings via Inter Control Center Protocol (ICCP) into its Energy Management System (EMS), which the CAISO can do today. This work involved significant coordination between the CAISO and transmission providers, updating various reliability applications, ensuring the CAISO has configured the highest emergency rating for a transmission line and has appropriate fallback logic for EMS to use seasonal ratings when hourly rating

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[7] *See* Letter order issued April 30, 2025 in docket ER25-1236.These tariff revisions clarified rules regarding (1) communication protocols for the submission of transmission line ratings for use in the day-ahead and real-time markets; (2) access to ratings used in the markets as well as participating transmission owners' transmission line rating methodologies; (3) the timing of when entities must submit ratings in advance of the day-ahead and real-time market; (4) use of hourly and seasonal ratings, if hourly ratings become unavailable; and (5) recognizing EDAM Entities will submit hourly ratings for use in the day-ahead and real-time markets.

[8] *California Independent System Operator Corp.,* 191 FERC ¶ 61,095 (2025).

information is not available. The CAISO can receive hourly ratings into its EMS via ICCP and stands ready to work with participating transmission owners, EDAM Entities, WEIM Entities, and Reliability Coordinator customers to integrate the receipt of ratings through ICCP. Ratings received via ICCP can trigger alarms if the CAISO or the relevant transmission provider observes a violation of a facility limit and inform real-time contingency analyses.

The CAISO has also deployed its webLineR application to accept and store hourly ratings. This application supports the submission to the CAISO of transmission line rating methodologies, seasonal ratings, emergency ratings, and hourly ratings consistent with the requirements of Order No. 881. The CAISO will use ratings submitted to this application in its day-ahead and real-time markets. The webLineR application also serves to support rating information exchange between reliability coordinators, transmission providers, and other entities. Finally, the application also serves as a repository to allow market participants and non-market participants to access historical information about ratings utilized by the day-ahead and real-time markets. WebLineR is functional and the CAISO has made the application available to users for testing and validation. Several entities are actively testing and utilizing webLineR.

Earlier this year, the CAISO completed necessary work to upload four seasonal ratings contemplated by Order No. 881 for its largest participating transmission owner into the CAISO Register, which is the authoritative database of transmission lines under

the CAISO's operational control.[9] The effort culminated over a year's worth of development and coordination with both internal and external stakeholders. This process included submission and validation of thousands of separate transmission components. Now established, this process allows the CAISO to continue to work with other participating transmission owners to submit and validate seasonal rating changes for transmission lines within the CAISO Register.

Notwithstanding implementation efforts to date, the CAISO is still completing the software code necessary to integrate hourly ratings into the CAISO market and reliability applications. This effort has faced delay largely arising from the concurrent effort of the CAISO and its market software vendor to implement new day-ahead market products and the EDAM design, which required the expertise and capacity of the same resources required to develop and deliver software code to implement Order No. 881. In addition, the CAISO supported the integration of PacifiCorp West, PacifiCorp East, and Portland General Electric into the day-ahead market. Important to the relief requested in this motion, the day-ahead market enhancements and the deployment of EDAM support the optimized use of transmission across a broad footprint in the Western Interconnection. This market functionality is already supporting economic transfers of energy, imbalance reserves, and reliability capacity in the day-ahead market in furtherance of the policy objectives underlying Order No. 881 to make more efficient use of existing transmission. The CAISO and its vendor had hoped to implement Order No. 881 simultaneously with the launch of the day-ahead market enhancements and EDAM,

[9] *See* CAISO Transmission Control Agreement, Section 4.2 https://www.caiso.com/documents/transmission-control-agreement.pdf.

but that effort proved too large a lift for our respective teams during the testing and go-live phases of that project.

The additional time requested in this motion will support integration testing of software code to ensure the proposed changes function properly. The additional time will also allow the CAISO and market participants to validate whether market systems are functioning as expected through a market simulation. Once testing and market simulation efforts are complete, the CAISO will then deploy tools and software into production. As part of this effort, the CAISO will conduct various tests to ensure deployment does not create system problems. For these reasons, the CAISO seeks additional time to implement its Order No. 881 tariff.

III. Request for Relief and Argument

The CAISO requests an extension of time until April 1, 2027 to implement its Order No. 881 tariff provisions, subject to the CAISO filing a notice with the Commission 7 days before the actual effective date. The Commission should grant this motion because good cause exists to do so.[10] Based on current development efforts and the scheduled delivery of software code from the CAISO's external vendor, implementation of Order No. 881 in December 2026 is not feasible. Currently, the CAISO anticipates receiving delivery of software code necessary to support Order No. 881 across its markets and reliability applications by the end of January 2027. The CAISO will perform functional testing and end-to-end testing of its systems during the month of February 2027. Thereafter, the CAISO will administer market simulation activities during the first

[10] 18 C.F.R. § 385.2008(a).

three weeks of March 2027, before advancing deployment activities during the last week of March to make Order No. 881 functionality available in the day-ahead and real-time markets on April 1, 2027. The CAISO is coordinating with its participating transmission owners, EDAM Entities, and WEIM Entities to support their submission of ratings consistent with Order No. 881 as soon as possible.

The software code for Order No. 881 will affect the network model used to define system parameters, pricing nodes, and market scheduling limits as well as multiple network applications supporting the CAISO's market processes and reliability applications. For this reason, the CAISO and its vendor must methodically undertake testing. The CAISO and market participants need to conduct a thorough market simulation to confirm that modeled outcomes reflect expected results.

For market design changes requiring software enhancements such as Order No. 881, the CAISO's testing phase will evaluate the completeness and quality of the delivered software solution. These testing activities will apply to enhancements to various applications as well as software to support the market optimization. Together, the CAISO and its vendor will need to determine if the software product meets the business and system requirements the CAISO identified during the requirements and design phases as well as how the software performs with the integration of downstream applications.

Completing a market simulation will allow the CAISO and market participants to assess Order No. 881 functionality in the market application as well as market participants' interfaces with the CAISO's systems. As part of this effort, the CAISO intends to run structured scenarios, which will allow the market participants to see end-

to-end functionality of how the market systems integrate line ratings pursuant to Order No. 881. Market participants may use market simulation as an opportunity to collect data and validate their expectations on the submission and use of line ratings as well as transparency of the ratings used by the market.

Once market simulation is complete, the CAISO will proceed with deployment. This phase consists of bringing the market enhancement from integration testing and simulation into production. As part of this process, the CAISO will conduct tests to ensure quality control of the new software. This due diligence is necessary to minimize the risk of a problem when the CAISO moves the new functionality into production. Granting this motion will allow for additional time necessary to assess tools to integrate hourly transmission line ratings into market processes consistent with the requirements of Order No. 881.[11]

IV. Informational Reports

The CAISO recognizes the importance of transparency regarding implementation of the requirements of Order No. 881, both in the CAISO balancing authority area as well as in the broader markets the CAISO administers. Consistent with existing Commission directives,[12] the CAISO commits to submitting informational reports no later than January 28, 2027 and September 30, 2027 to detail the status of Order No.

[11] The Commission has granted extensions of time for other transmission providers to comply with Order No. 881. *Sw. Power Pool, Inc.*, 196 FERC ¶ 61,151 (2026) (granting an extension until no later than April 1, 2027.) *Midcontinent Indep. Sys. Operator*, *Inc*., 191 FERC ¶ 61,192 (2025) (granting an extension until no later than December 31, 2028.) *N.Y. Indep. Sys. Operator, Inc.,* 186 FERC ¶ 61,237 (2024) (granting an extension until no later than December 31, 2028).

[12] *California Independent System Operator Corp.,* 191 FERC ¶ 61,095 (2025) at P 11.

881 implementation in its balancing authority area as well as in EDAM and the WEIM. In the January 2027 report, the CAISO will detail its progress and confirm the milestones for testing and market simulation as well as the readiness of its participating transmission owners, EDAM Entities, and WEIM Entities to submit transmission line ratings pursuant to Order No. 881 for use in the markets as of April 2027. In its September 2027 report, the CAISO will confirm the operating status of its tools and software for the submission of hourly ratings and integration of those ratings in its markets as well as any issues it has observed with the use of these ratings. In addition, the CAISO will confirm whether it is receiving ratings from its participating transmission owners as well as entities participating in EDAM and the WEIM.

V. Conclusion

The CAISO respectfully requests an extension of time until April 1, 2027 to implement its Order No. 881 tariff provisions, subject to the CAISO filing a notice with the Commission 7 days before the actual effective date. Granting this motion will allow the CAISO to coordinate necessary software deployment to support Order No. 881 implementation. The extension of time will also allow the CAISO to conduct market simulation activities. The CAISO is actively coordinating with its participating transmission owners, EDAM Entities, and WEIM Entities to support their readiness to begin submission of hourly ratings consistent with Order No. 881 as soon as possible. The CAISO commits to submitting informational reports as described herein no later

than January 28, 2027 and September 30, 2028.

Respectfully submitted,

/s/ Andrew Ulmer

Roger E. Collanton
General Counsel
Anthony Ivancovich
Deputy General Counsel
Andrew Ulmer
Assistant General Counsel
California Independent System
Operator Corporation
250 Outcropping Way
Folsom, CA 95630
Tel: (916) 608-7209
Fax: (916) 608-7222

Counsel for the California Independent
System Operator Corporation

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CERTIFICATE OF SERVICE

I certify that I have served the foregoing document upon the parties listed on the official service list in the captioned 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 on this 2nd day of November 2026.

/s/ Ariana Rebancos
Ariana Rebancos