

191 FERC ¶ 61,095
FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC 20426

April 30, 2025

In Reply Refer To:
California Independent
System Operator Corporation
Docket No. ER22-2362-002

California Independent System Operator Corporation
250 Outcropping Way
Folsom, CA 95630

Attention: Andrew Ulmer

Dear Mr. Ulmer:

1. On January 27, 2025, the California Independent System Operator Corporation (CAISO) filed a motion for extension of time from June 15, 2025 until December 17, 2026 to implement the requirements of Order Nos. 881 and 881-A¹ and CAISO's tariff provisions relating thereto,² subject to CAISO's notifying the Commission seven days prior to the actual effective date. CAISO also requests an extension of time up to and including October 15, 2027 on behalf of: (1) CAISO's participating transmission owners to implement their requirements under Order No. 881 and the CAISO tariff; and (2) public utility transmission providers participating in the Extended Day-Ahead Market (EDAM) and Western Energy Imbalance Market (WEIM), as Order No. 881 relates to

¹ *Managing Transmission Line Ratings*, Order No. 881, 177 FERC ¶ 61,179 (2021), *order addressing arguments raised on reh'g*, Order No. 881-A, 179 FERC ¶ 61,125 (2022).

² On April 20, 2023, the Commission issued an order accepting CAISO's Order No. 881 compliance filing, subject to CAISO's notifying the Commission of the actual effective date of the revisions within five business days of their implementation but effective no later than June 15, 2025, and subject to a further compliance filing to be submitted within 60 days of the date of issuance of the order. *Cal. Indep. Sys. Operator Corp.*, 183 FERC ¶ 61,037 (2023). On December 13, 2023, CAISO's further compliance filing was accepted. *Cal. Indep. Sys. Operator Corp.*, Docket No. ER22-2362-001 (Dec. 13, 2023) (delegated order).

their submission of ratings for use in the day-ahead and real-time markets that CAISO administers.

2. CAISO argues that good cause exists to grant its requests for extension of time. CAISO states that based on current internal development efforts and the scheduled delivery of tools and software code from its external vendors, implementation of Order No. 881 by June 15, 2025 is not possible.³ CAISO explains that granting its motion will allow for additional time necessary to develop and test the tools CAISO and market participants will use to integrate hourly transmission line ratings into market processes, as well as store and make transmission line ratings available consistent with the requirements of Order No. 881. According to CAISO, participating transmission owners and entities participating in EDAM and WEIM will also need additional time to closely scrutinize and validate ratings for accuracy so that they do not cause operating problems. CAISO asserts that the extension of time will also allow it to coordinate software changes with two major market initiatives – its day-ahead market enhancements and EDAM. CAISO notes that the Commission has previously granted extensions of time for other transmission providers to comply with Order No. 881 to allow them to coordinate other planned work with Order No. 881 implementation.⁴

3. CAISO further explains that it is undertaking work to develop new applications and processes to support Order No. 881 implementation. According to CAISO, because it completed system changes to support the provision of transmission line ratings, it now has the capability to receive hourly ambient adjusted ratings in its Energy Management System (EMS) via Inter-Control Center Communications Protocol. In addition, CAISO states that it is actively working to deploy a custom version of webLineR to support the submission of transmission line rating methodologies, seasonal ratings, emergency ratings, and hourly ratings consistent with the requirements of Order No. 881. By CAISO's estimates, the work on the webLineR application will continue through the remainder of 2025.⁵ CAISO states that alongside deploying its webLineR application, CAISO is working to design software necessary for its day-ahead and real-time market systems to consume hourly ratings from webLineR, as well as reflect alternative ratings, when necessary. As such, CAISO concludes, implementation of Order No. 881 affects multiple internal and external applications.⁶

³ CAISO Motion at 5.

⁴ *Id.* at 6 (citing *N.Y. Indep. Sys. Operator, Inc.*, 186 FERC ¶ 61,237 (2024); *S. Co. Servs. Inc.*, 187 FERC ¶ 61,055 (2024)).

⁵ *Id.* at 7-8.

⁶ *Id.* at 8.

4. CAISO explains that it expects to receive delivery of software code from its external vendors and complete development efforts for its internal applications in the third quarter of 2025 and thereafter it plans to conduct testing and undertake a market simulation before moving Order No. 881 into the final deployment implementation phase.⁷ CAISO notes that testing is required by good utility practice and CAISO's tariff.⁸ Once this final phase is complete, CAISO plans to put its software enhancements into production for the real-time market and day-ahead market applications in the first or second quarter of 2026. CAISO states that it requests an extension until December 17, 2026 out of an abundance of caution in case it encounters unforeseen implementation issues and delays.⁹

5. CAISO contends that to meet the Order No. 881 requirements, it needs to coordinate the deployment, testing, and readiness of its systems with the readiness of each CAISO participating transmission owner's system. CAISO argues that the extension of time requested in this motion will permit participating transmission owners to finalize transmission line rating methodologies, as well as systems and processes to calculate and submit hourly and other ratings that align with the requirements of Order No. 881. CAISO estimates that these efforts undertaken by participating transmission owners may stretch into 2027 and therefore requests an extension of time until October 15, 2027 for the CAISO participating transmission owners to implement their requirements under Order No. 881 and the CAISO tariff. CAISO adds that the extension of time will also permit participating transmission owners to sequence other work that may relate to or overlap with Order No. 881 implementation, such as efforts to replace EMS. CAISO contends that implementing Order No. 881 before deployment of these systems would duplicate Order No. 881 implementation work. CAISO also notes that other participating transmission owners, EDAM entities, and WEIM entities may have project work that creates dependencies with Order No. 881 and the additional time requested will support their own internal coordination with implementation of those upgrades and Order No. 881 requirements.¹⁰

6. CAISO further states that centralized remedial action scheme(s) and/or stand-alone remedial action scheme(s) may require new relay hardware or special software to be programmed into new or existing relays to comply with Order No. 881. According to CAISO, participating transmission owners, EDAM entities, or WEIM entities with these remedial action schemes will need to analyze each remedial action scheme individually

⁷ *Id.* at 9.

⁸ *Id.*

⁹ *Id.* at 8-9.

¹⁰ *Id.* at 13.

and make all required upgrades or additional system changes. Testing will then be needed to validate the ratings being used for the alarms before the solution can be used in a production environment. CAISO believes that these steps will require substantial time and support the need for an extension of time until 2027 for some entities to implement their requirements under Order No. 881.¹¹

7. CAISO further states that it needs to coordinate the Order No. 881 implementation with its deployment of day-ahead market enhancements and EDAM. According to CAISO, development, deployment and testing of these systems will occupy CAISO and its vendors throughout much of 2025. CAISO states that it wishes to coordinate these efforts with its activities to implement Order No. 881, so that CAISO and its vendors can ensure the software to support the day-ahead market enhancements and EDAM design will also accommodate hourly transmission line ratings.¹²

8. CAISO states that it recognizes the importance of transparency related to implementation of the requirements of Order No. 881, both in the CAISO balancing authority area as well as in the broader market CAISO administers.¹³ Accordingly, CAISO commits to submitting informational reports no later than January 28, 2027 and January 28, 2028 to detail the status of Order No. 881 implementation in its balancing authority area, as well as WEIM and EDAM.¹⁴

9. The Commission issued notice of CAISO's motion on February 27, 2025, with answers due on or before March 6, 2025. The following entities submitted timely motions to intervene: San Diego Gas & Electric Company (SDG&E), Arizona Public Service Company, and Puget Sound Energy, Inc. (Puget). Puget submitted comments in support of CAISO's motion for extension of time. Pacific Gas and Electric Company, SDG&E, and Southern California Edison Company submitted joint comments in support of CAISO's motion for extension of time.

¹¹ *Id.* at 14.

¹² *Id.* at 10-11.

¹³ *Id.* at 15.

¹⁴ CAISO states that, in these reports, it 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 its markets. In addition, the CAISO states that it will confirm whether it is receiving ratings from its participating transmission owners as well as entities participating in WEIM and EDAM. *Id.*

10. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2024), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

11. We grant CAISO's request for extension of time to implement the tariff revisions accepted by the Commission in its Order No. 881 compliance filing until December 17, 2026. CAISO must make an informational filing notifying the Commission of the actual effective date of its tariff provisions no less than seven days prior to the date CAISO implements the tariff provisions. CAISO should use the eTariff Type of Filing Code 150 – Data Response/Supplement the Record. We also grant CAISO's requests on behalf of its participating transmission owners and on behalf of the providers in EDAM and WEIM to extend the time to implement their requirements under Order No. 881 and the CAISO tariff up to and including October 15, 2027, as it relates to their participation in the markets administered by CAISO.¹⁵ We expect the participating transmission owners, WEIM entities, and EDAM entities to also notify the Commission seven days prior to the actual effective date. However, we encourage CAISO, participating transmission owners, and WEIM and EDAM entities to implement their Order No. 881-compliant tariff revisions as early as practicable. We accept CAISO's commitment to submit informational reports no later than January 28, 2027 and January 28, 2028 that detail CAISO's progress in implementing its Order No. 881 compliance upgrades.¹⁶

By direction of the Commission.

Carlos D. Clay,
Deputy Secretary.

¹⁵ This order does not address any transmission owner's obligation to comply with Order No. 881 with respect to its individual open access transmission tariff.

¹⁶ These annual reports should be filed in the instant docket and will not be noticed for comment or require Commission action.