184 FERC ¶ 61,119
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Willie L. Phillips, Acting Chairman;
James P. Danly, Allison Clements,
and Mark C. Christie.

California Independent System Operator Corporation Docket No. ER23-2020-000

ORDER ON TARIFF REVISIONS AND DIRECTING COMPLIANCE

(Issued August 24, 2023)

1. On May 31, 2023, pursuant to section 205 of the Federal Power Act (FPA)[1] and Part 35 of the Commission's regulations,[2] California Independent System Operator Corporation (CAISO) submitted proposed changes to its market processes in its Open Access Transmission Tariff (Tariff) to: (1) adjust the shift factor threshold it applies for considering the effectiveness of a resource in managing congestion; and (2) establish a new process to permit temporary changes to parameter values the CAISO market uses to reflect relative scheduling priorities and constraints. As discussed below, we accept in part, subject to condition, and reject in part, CAISO's proposed Tariff revisions, effective as of the actual effective date, as requested, and direct CAISO to submit a compliance filing within 30 days of the date of this order. We also direct CAISO to notify the Commission of the actual effective date of the Tariff revisions within five business days of that date.[3]

I. Filing

2. CAISO proposes to implement two sets of changes to its market processes. First, CAISO proposes to lower its shift factor threshold from two percent to two-tenths of a

[1] 16 U.S.C. § 824d.

[2] 18 C.F.R. pt. 35 (2022).

[3] The eTariff records submitted by CAISO contain an effective date of 12/31/9998. CAISO requests an effective date of no later than September 30, 2023.

percent for Default Load Aggregation Points (LAP),[4] Trading Hubs,[5] and Interties[6] with significant total transfer capability. Second, CAISO proposes a new process to permit temporary changes to the parameter values the CAISO market uses to reflect relative scheduling priorities and constraints.

3. CAISO states that the two main elements of the filing are discrete, severable, and not interdependent with each other. Further, CAISO states that the proposal to apply a lower shift factor threshold to Default LAPs and Trading Hubs is severable from the proposal to apply a lower shift factor threshold to certain Interties. CAISO requests that the Commission separately evaluate the justness and reasonableness of the three aspects of the filing and issue an order accepting the proposed Tariff revisions by July 31, 2023.[7] CAISO also requests an effective date of no later than September 30, 2023, subject to CAISO filing a notice with the Commission within five days of the actual effective date.[8]

II. Notice and Responsive Pleadings

4. Notice of the filing was published in the *Federal Register*, 88 Fed. Reg. 37,060 (June 6, 2023), with interventions and protests due on or before June 21, 2023. Boston Energy Trading and Marketing LLC; City of Santa Clara, California; Modesto Irrigation District; Northern California Power Agency; Southern California Edison Company; and The Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California filed timely motions to intervene. Appian Way Energy Partners, LLC (Appian Way), DC Energy, LLC (DC Energy), CAISO's Department of Market Monitoring (DMM),

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[4] The Tariff defines Default LAP as "The LAP defined for the [Transmission Access Charge] Area at which all Bids for Demand shall be submitted and settled, except as provided in Sections 27.2.1 and 30.5.3.2." CAISO, CAISO eTariff, app. A Definitions (0.0.0), *id*., Default LAP (0.0.0).

[5] The Tariff defines Trading Hub as "An aggregation of network Pricing Nodes, such as Existing Zone Generation Trading Hubs, maintained and calculated by the CAISO for settlement and trading purposes posted by the CAISO on its CAISO website." *Id.*, app. A Definitions (0.0.0), *id*., Trading Hub (0.0.0).

[6] The Tariff defines Intertie as "A transmission corridor that interconnects the CAISO balancing authority area with another balancing authority area." *Id.*, app. A Definitions (0.0.0), *id*., Intertie (1.0.0).

[7] Transmittal at 2.

[8] *Id*. at 1-2. As noted above, CAISO input the indeterminate effective date of 12/31/9998 for the revised Tariff records.

and Energy Trading Institute (ETI) filed timely motions to intervene and comments. On June 29, 2023, CAISO filed an answer to the comments.

III. Discussion

A. Procedural Matters

5. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2022), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

6. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2022), prohibits an answer to protests unless otherwise ordered by the decisional authority. We accept CAISO's answer because it provided information that assisted us in our decision-making process.

B. Substantive Matters

7. As discussed below, we accept CAISO's proposed Tariff revisions that lower the shift factor threshold from two percent to two-tenths of a percent for Default LAPs and Trading Hubs. We also accept CAISO's proposed Tariff revisions that permit it to make temporary changes to parameter values the CAISO market uses to reflect relative scheduling priorities and constraints, subject to condition.[9] We direct CAISO to submit a compliance filing within 30 days of the date of this order to remove certain language from section 31.4.1 (Temporary Changes to Scheduling Run Parameter Values) of the Tariff.

8. We reject CAISO's proposed Tariff revisions that lower the shift factor threshold for Interties with significant total transfer capability. Accordingly, we direct CAISO to submit a compliance filing within 30 days of the date of this order to remove references to "Interties with significant total transfer capability" in section 27.4.3.5 (Effectiveness Threshold) of its Tariff.[10]

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[9] *See NRG Power Mktg., LLC v. FERC*, 862 F.3d 108, 114-15 (D.C. Cir. 2017) (discussing the Commission's authority to propose modifications to a utility's FPA section 205 rate proposal).

[10] *See id.* In this case, CAISO states that the proposal to apply a lower threshold to certain Interties with significant total transfer capability is severable from the remainder of the proposal. Transmittal at 2.

1. **Shift Factor Threshold**

9. CAISO states that it uses shift factors to both calculate locational marginal prices and manage congestion. CAISO explains that shift factors measure the effectiveness of injecting or withdrawing power on the transmission system at a specific location relative to the change of power flow on a specific transmission constraint. CAISO states that it calculates shift factors for both individual nodes, such as an individual generator location, and aggregated pricing nodes, such as Default LAPs and Trading Hubs.[11]

10. According to CAISO, it adopted a shift factor threshold in 2009 to balance the sometimes-competing priorities between accurate price formation and effective congestion management.[12] CAISO states that considering every shift factor, regardless of magnitude, would provide the most accurate prices possible, but such accuracy would create a tradeoff in the form of less effective congestion management. CAISO explains that using resources with a very low shift factor for congestion management could lead to an ineffective redispatch of resources with little impact on relieving the congested transmission constraint being managed. CAISO adds that using a very low shift factor to manage congestion across the entire system could easily create computational problems.[13]

11. CAISO states that its markets currently employ a two percent shift factor threshold in price formation and to determine what power injections and withdrawals CAISO uses to manage congestion on transmission constraints. In the price formation process, the CAISO market disregards the impact of resources with shift factors below the two percent threshold for any binding constraint to derive the marginal congestion component of a locational marginal price. In the congestion management process, the CAISO market only considers resources with a shift factor of at least two percent for redispatch.[14]

12. However, CAISO states that the current approach of applying the same two percent shift factor threshold to all locations has not struck the appropriate balance between accurate price formation and effective congestion management.[15] CAISO states

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[11] Transmittal at 2.

[12] *Id*. at 3, 7; *Cal. Indep. Sys. Operator Corp.*, 126 FERC ¶ 61,147, *order on compliance*, 127 FERC ¶ 61,233 (2009).

[13] Transmittal at 3-4; *id.* attach. D (Board Memoranda Tariff Amendment – Market Parameter) at 3.

[14] Transmittal at 3.

[15] *Id*. at 4, 7.

that under the current approach, the CAISO market model may ignore aggregated locations that could contribute significantly to price formation and congestion management with respect to a given transmission constraint.[16] CAISO provides an example of two nodes with an identical shift factor of 1.8% with respect to a transmission constraint of 250 megawatts (MW): the first node represents an individual generator producing 500 MW with a nine MW contribution to flow on the constraint and the second node represents a Default LAP with 20,000 MW of load with a 360 MW contribution to flow on the constraint. CAISO states that under the existing two percent shift factor threshold, the market would ignore these two situations in the congestion and price formation process, although the second node could resolve congestion on the transmission constraint.[17]

13. CAISO states that the shift factor threshold has also had specific impacts on the congestion revenue rights (CRR) market.[18] CAISO states that in 2019 it revised its CRR settlement rules to scale CRR payments based on the day-ahead market congestion revenues CAISO collects from the constraints over which it modeled the CRRs as flowing.[19] CAISO states that, following the implementation of scaled CRR settlement, it observed that applying the shift factor threshold to locations with significant injections and withdrawals resulted in the market not accounting for significant flow contributions in estimating power flows and financially settling the CRRs.[20]

14. CAISO states that the use of a shift factor threshold in the congestion management of the day-ahead energy market has manifested in two main issues in the CRR market. First, CAISO explains, the use of a shift factor threshold can result in an overpayment of CRR settlements due to overestimating the implied CRR flow on a given transmission constraint. CAISO states that both the day-ahead market and the CRR market calculate shift factors and produce marginal congestion components that inform prices. Nevertheless, the shift factors from the CRR market processes can differ from those used in the day-ahead market for several reasons, including transmission configuration differences. CAISO further states that it uses the shift factor threshold in the day-ahead market but not in the CRR market. CAISO explains that, as a result, the flow estimated

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[16] *Id*. at 4.

[17] *Id*. at 4-5.

[18] CRRs are financial instruments that market participants can acquire through a CAISO-administered allocation and auction process to provide a level of financial protection against the risks associated with unpredictable congestion charges. *Id*. at 5.

[19] *Id*. at 5-6; *see Cal. Indep. Sys. Operator Corp.*, 165 FERC ¶ 61,085 (2018).

[20] Transmittal at 6.

in the CRR auction will consider the contributions of all CRRs, but when these CRR injections are applied to the day-ahead shift factors to calculate CRR payments, only the injections and withdrawals related to shift factors greater than two percent will contribute to the CRR estimated flow. According to CAISO, not accounting for the contributions of locations with shift factors below the threshold resulted in a higher CRR flow in settlements than the CRR flow from the CRR process.[21]

15. Second, CAISO states that applying the shift factor threshold to locations with significant injections or withdrawals may result in the market not accounting for significant flow contributions in estimating power flows and settling CRRs. CAISO explains that the market does not consider locations below the two percent shift factor threshold for redispatch for congestion management. CAISO states that because the market does not reflect the effectiveness of these resources' contributions in locational marginal prices, it leads to a potential under-collection of congestion rents to fund CRR settlements.[22]

a. CAISO Proposal

16. To address the limitations discussed above, CAISO proposes the following revision to section 27.4.3.5 (Effective Threshold) of its Tariff:

> The CAISO Markets software includes a lower effectiveness threshold setting that governs whether the software will consider a bid "effective" for managing congestion on a congested Transmission Constraint, which in the case of Nomograms will be applied to the individual flowgates that make up the Nomogram, rather than to the Nomogram itself. <u>The CAISO sets this threshold at two-tenth of a percent (.2%) for Trading Hubs; Default LAPs; and Interties with significant Total Transfer Capability, as specified in the Business Practice Manual. The CAISO sets the threshold at two percent (2%) for all other Nodes</u>. ~~The CAISO will set this threshold at two percent (2%).~~[23]

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[21] *Id.*; *id.* attach. C (Final Proposal Tariff Amendment – Market Parameter) at 12-13.

[22] *Id.* at 6.

[23] CAISO, CAISO eTariff, § 27.4.3 CAISO Markets Scheduling and Pricing Parameters (13.0.0).

CAISO proposes to reduce the shift factor threshold from two percent to two-tenths of a percent for large aggregated demand and generation locations—Default LAPs and Trading Hubs. CAISO also proposes to establish authority to apply this lower shift factor threshold to Interties with significant total transfer capability exhibiting inefficiencies similar to those identified for Default LAPs and Trading Hubs. CAISO represents that through more formal analysis of the historical impact on market results, CAISO will identify the specific Interties in its business practice manual and may revise the specific Interties over time based on operational experience and changes in market dynamics. CAISO states that it expects to apply the lower shift factor threshold only to Interties that routinely represent volumes significantly in excess of the largest individual resource locations. CAISO maintains that the existing two percent threshold would continue to apply to all other pricing locations to avoid the potential increase in computational efforts in the market clearing process and inefficient redispatch of resources that offer little benefit for congestion management.[24]

17. CAISO states that the proposed change can either increase or reduce the marginal cost of congestion in a locational marginal price depending on the relative effectiveness of the Default LAPs and Trading Hubs to the congestion management on the transmission constraint.[25] CAISO also states that by reducing the shift factor threshold used in the day-ahead market at aggregated locations with large injections and withdrawals, the CRR and day-ahead market models will more closely converge, thus reducing the risk of CRR overpayments and making CRRs a more effective hedging instrument.[26]

b. <u>Comments</u>

18. Appian Way supports CAISO's proposal to adjust the shift factor threshold in setting locational marginal prices.[27] Appian Way asserts that CAISO's proposal mitigates (but does not correct) a market flaw that has resulted in unjust and unreasonable, and significant, unintended market outcomes associated with the allocation of CRR revenue inadequacy ("underfunding") on a constraint basis as part of reforms that CAISO implemented in 2019.[28] Appian Way states that, even with the shift factor threshold change, CAISO's current Tariff provisions allocate all congestion shortfalls to

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[24] Transmittal at 7.

[25] *Id*. at 8.

[26] *Id*.

[27] Appian Way Comments at 1.

[28] *Id*. at 2.

CRR holders regardless of whether the shortfall is related to physical Integrated Forward Market transfer capability being reduced relative to that assumed in the CRR market.[29] Appian Way argues that there is a false sense of precision in the assumption that it is reasonable for CAISO to allocate more than the total congestion shortfall in any month. Appian Way also argues that if CAISO insists on allocating congestion shortfalls on a constraint-by-constraint basis, premised on the notion that these shortfalls are caused by reduced physical capacity in the Integrated Forward Market relative to that assumed in the CRR models (such as due to transmission outages), then CAISO should track the actual physical transfer capability on congested lines in the Integrated Forward Market and measure this compared to the CRR market.[30] Appian Way requests that the Commission approve CAISO's proposal to adjust the shift factor threshold as described in CAISO's filing.[31]

19. DC Energy supports CAISO's proposal to reduce the shift factor threshold CAISO applies in its day-ahead market before considering an injection or withdrawal at certain aggregated settlement locations on its system for purposes of managing congestion. DC Energy asserts that this proposal will improve price formation and better align day-ahead and CRR market models.[32] Further, DC Energy states that it supports CAISO's proposal to consider reducing the shift factor threshold on certain Interties to two-tenths of a percent under the process CAISO has outlined in its business practice manual. DC Energy states that certain Intertie locations represent large MW volumes of total transfer capability, and that even with a shift factor of less than two percent, injections or withdrawals can make a significant contribution to congestion and price formation at electrically distant nodes.[33] DC Energy requests that the Commission set or allow the earliest possible effective date to reduce uncertainty for CRR holders.[34] DC Energy states that CRR market participants cannot accurately forecast which settlement locations will be below the current shift factor threshold for a given CRR source or sink location,

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[29] *Id*. at 9.

[30] *Id*. at 10.

[31] *Id*. at 11.

[32] DC Energy Comments at 2.

[33] *Id*. at 3.

[34] *Id*. at 4.

which creates substantial, ongoing uncertainty regarding the level of CRR underfunding.[35]

20. DMM supports CAISO's proposal to reduce the shift factor thresholds for CAISO's balancing authority area's major load aggregation points and Trading Hubs, and to have the Tariff authority to reduce the shift factor thresholds for large Intertie scheduling points. DMM states that the proposal involves changes to a highly technical detail of CAISO's optimization software and asserts that the proposal warrants monitoring for the correct implementation of the intended design and for significant unintended consequences of the design.[36]

21. ETI states that it commends CAISO for the proposed reduction in the shift factor threshold as a means to partially address the significant level of underfunding of CRR settlements in CAISO. ETI asserts that such underfunding harms CRR holders and creates unjust and unreasonable scenarios where holders are improperly making payments on CRRs in instances when they should be receiving payments based on realized market conditions.[37] In addition, ETI argues that CAISO's path-based underfunding is problematic because it is only transparent to market participants holding those specific paths.[38] ETI requests that the Commission approve CAISO's proposed reduction of the shift factor threshold to two-tenths of a percent. ETI also requests that the Commission urge CAISO to continue analyzing the remaining causes of underfunding and to assess the impact of CRR changes implemented in 2019.[39]

c. CAISO Answer

22. CAISO states that commenters support approval of the proposed Tariff revisions but that Appian Way and ETI's arguments regarding additional reform in CAISO's CRR market go beyond the scope of CAISO's Tariff amendment. CAISO argues that the Commission need not consider Appian Way and ETI's comments on additional reform to the CRR market to approve CAISO's proposed Tariff revisions as just and reasonable.[40]

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[35] *Id.*

[36] DMM Comments at 3.

[37] ETI Comments at 3.

[38] *Id.* at 7.

[39] *Id.* at 8.

[40] CAISO Answer at 1.

CAISO states that it has explained to stakeholders participating in the initiative underlying these Tariff revisions that it will consider requests for additional market design initiatives in the context of its stakeholder initiative roadmap process.[41] In addition, CAISO states that as it performs analysis on the drivers behind settlement outcomes observed by market participants, it will share the results of that analysis, which will serve to inform areas of market design for further consideration. CAISO states that Appian Way and ETI may raise their concerns through that process.[42]

d. Commission Determination

i. Shift Factor Threshold for Default LAPs and Trading Hubs

23. We accept CAISO's proposed Tariff revisions to lower the shift factor threshold to two-tenths of a percent for Default LAPs and Trading Hubs and find that these revisions are just and reasonable and not unduly discriminatory or preferential. We find that applying the lower shift factor threshold only to Default LAPs and Trading Hubs improves price formation while avoiding the computational challenges and the redispatch of resources with little impact on relieving congested transmission constraints that would result from applying a lower threshold to the entire system. The proposal will also more closely align the day-ahead market model with the CRR market model. We agree with CAISO that lowering the shift factor threshold at these aggregated locations will allow the market to better account for significant flow contributions in estimating power flows, which will help reduce the incidence of overpayment of CRR settlements and the under-collection of congestion rents to fund CRR settlements.[43] We therefore accept CAISO's proposal to lower the shift factor threshold for Default LAPs and Trading Hubs.

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[41] *Id*. at 2-3. *See* CAISO, *Market Parameter Changes Enhancement Revised Final Proposal*, at 7 (Mar. 14, 2023), http://www.caiso.com/InitiativeDocuments/Revised-Final-Proposal-Market-Parameter-Changes-Enhancement.pdf.

[42] CAISO Answer at 3.

[43] Transmittal at 6.

ii. Shift Factor Threshold for Interties with Significant Total Transfer Capability

24. While we accept CAISO's proposal to lower the shift factor threshold for Default LAPs and Trading Hubs, we find that CAISO's proposal to apply the lower shift factor threshold to "Interties with significant total transfer capability, as specified in the Business Practice Manual" has not been shown to be just and reasonable and may be unjust, unreasonable, or unduly discriminatory or preferential.[44] CAISO states that it expects to apply the lower shift factor threshold to Interties with significant enough transfer capability exhibiting inefficiencies similar to those identified for Default LAPs and Trading Hubs, and only to those Interties that routinely represent volumes significantly in excess of the largest individual resource locations. CAISO explains that it will identify the specific Interties "[t]hrough more formal analysis of the historical impact on market results" and proposes to incorporate the list of Interties with significant transfer capability in its business practice manual.[45]

25. CAISO, however, has not included a description of the proposed methodology for identifying Interties with significant total transfer capability in the instant filing nor indicated whether it will include the methodology in its business practice manual or Tariff. In particular, CAISO does not provide sufficient detail concerning how it will determine whether the total transfer capability of an Intertie routinely represents volumes significantly in excess of the largest individual resource locations, nor what amount of total transfer capability in excess of such individual resource locations would be considered significant for this purpose.

26. As an initial matter, we find that the methodology for identifying Interties with significant total transfer capability would significantly affect rates, terms, and conditions. As CAISO explains, shift factors are used to both manage congestion and price electricity at different locations on the transmission system based on congestion.[46] Generally, when a public utility adopts a rule, standard, or practice that significantly affects its rates, the Commission requires the public utility to make a filing pursuant to FPA section 205 to amend its tariff.[47] The Commission uses a "rule of reason" test to determine which rules,

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[44] CAISO, CAISO eTariff, § 27.4.3 CAISO Markets Scheduling and Pricing Parameters (13.0.0).

[45] Transmittal at 7.

[46] *Id*. at 2.

[47] *Preventing Undue Discrimination & Preference in Transmission Serv.*, Order No. 890, 118 FERC ¶ 61,119, at P 1633 (citing *City of Cleveland v. FERC*, 773 F.2d 1368, 1376 (D.C. Cir. 1985)), *order on reh'g*, Order No. 890-A, 121 FERC ¶ 61,297 (2007), *order on reh'g*, Order No. 890-B, 123 FERC ¶ 61,299 (2008), *order on reh'g*,

standards, and practices significantly affect rates and services and must be included in the tariff.[48] The Commission has stated that the rule of reason test requires a case-by-case analysis of what belongs in the tariff as opposed to what may be included in the business practice manual.[49]

27. We therefore conclude that, at minimum, a description of the methodology for identifying which Interties have significant total transfer capability must be included in the Tariff.[50] Absent a description of the proposed methodology for identifying Interties with significant total transfer capability, we cannot determine whether the proposal is just and reasonable. Because CAISO does not include such a description in its proposed Tariff revisions, we reject the proposal to apply a lower shift factor threshold to certain Interties. Accordingly, we direct CAISO to submit a compliance filing within 30 days of the date of this order to remove references to Interties with significant total transfer capability in section 27.4.3.5 (Effectiveness Threshold) of its Tariff.

28. We find that Appian Way and ETI's recommendations regarding the CRR market[51] are beyond the scope of this proceeding. As discussed above, we find that the Tariff provisions proposed in CAISO's FPA section 205 filing, with one exception also discussed above, are just and reasonable and therefore need not further consider alternative rate designs.[52]

Order No. 890-C, 126 FERC ¶ 61,228, *order on clarification*, Order No. 890-D, 129 FERC ¶ 61,126 (2009).

[48] Order No. 890, 118 FERC ¶ 61,119 at P 1649.

[49] *See Cal. Indep. Sys. Operator Corp.*, 122 FERC ¶ 61,271, at P 17 (2008) (citing *Cal. Indep. Sys. Operator Corp.*, 116 FERC ¶ 61,274, at P 1370 (2006)).

[50] *See, e.g.*, *City of Cleveland v. FERC*, 773 F.2d 1368, 1376 (D.C. Cir. 1985) (finding that utilities must file "only those practices that affect rates and service significantly, that are reasonably susceptible of specification, and that are not so generally understood in any contractual arrangement as to render recitation superfluous").

[51] Appian Way Comments at 9-11; ETI Comments at 7-8.

[52] *See, e.g.*, *City of Bethany v. FERC*, 727 F.2d 1131, 1136 (D.C. Cir. 1984) (finding that, when determining whether a proposed rate was "just and reasonable," as required by the FPA, the Commission properly did not consider "whether a proposed rate schedule is more or less reasonable than the alternative rate designs").

2. Scheduling Parameters

29. CAISO's market optimization uses a set of configurable scheduling parameters to enforce scheduling priorities and guide the relaxation of constraints in the market clearing process. CAISO states that scheduling parameters are relevant when the market software has exhausted economic solutions and uneconomical adjustments are necessary to clear the market and resolve constraints.[53]

30. CAISO states that even with its diligent efforts to study, analyze, and regression-test the parameter values, given the large number of different scenarios the market can encounter day-to-day, conditions may arise under which the predefined parameter values do not preserve relative scheduling priorities or constraints as intended. CAISO explains that the parameter values and the scheduling priorities are most likely to fall out of synchronization under extreme and stressed market and system conditions that require the market to enforce uneconomical adjustments in which the parameter values are important to obtain a market solution.[54]

31. CAISO contends that under extreme events such as the tight supply conditions the CAISO system faced on July 9, 2021, when the Bootleg Fire in southern Oregon caused a derate on the California-Oregon Intertie, it could have avoided multiple uneconomical adjustments and relaxation of constraints if it had the authority to adjust the parameter values quickly. CAISO states that, however, many of these values are defined in its Tariff and cannot be changed without CAISO submitting a filing to the Commission under section 205 of the FPA.[55]

a. CAISO Proposal

32. To address the limitations described above, CAISO proposes to create the following new section 31.4.1 (Temporary Changes to Scheduling Run Parameter Values) in the Tariff:

> If the CAISO determines it is necessary to modify the scheduling run parameter values in sections 31.4, 34.12.1, or 34.12.2 to address market solutions that do not align with scheduling priorities or avoid operational or reliability problems the resolution of which would otherwise require recurring operator intervention outside normal scheduling and

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[53] Transmittal at 9.

[54] *Id*.

[55] *Id*. at 10.

> market procedures, it may temporarily modify the value for a period up to ninety days, provided however CAISO will file such change with FERC under Section 205 of the Federal Power Act within thirty days of such modification. If circumstances reasonably allow, CAISO will consult with FERC and the CAISO's Market Monitoring Unit before implementing such modification. In all circumstances, the CAISO will (i) consult with those entities as soon as reasonably possible after implementing a temporary modification, and (ii) notify Market Participants within one business day after the change of any temporary modification and explain the reasons for the change. This section does not authorize the CAISO to change the scheduling run parameter values in a manner that changes the relative scheduling run priorities specified in sections 31.4, 34.12.1, and 34.12.2.[56]

33. CAISO states that the proposed procedures would allow CAISO to modify the scheduling parameter values for a period of no more than 90 days to ensure market solutions align with intended priorities or avoid future operational or reliability problems. CAISO states that it will notify and consult with DMM and the Commission as soon as reasonably possible after implementing a temporary change, if not beforehand. CAISO states that making such a change would require CAISO to file a Tariff revision with the Commission within 30 days of any modification to a scheduling parameter. CAISO states that the proposed procedure would also require CAISO to notify market participants of any temporary modification within one business day and explain the reasons for the change.[57] CAISO stresses that its proposal does not permit CAISO to change the relative scheduling priorities specified in sections 34.1 and 34.12 of the Tariff. CAISO maintains that the proposed Tariff section only permits CAISO to tweak the specified penalty parameter values within the relative scheduling priority ranges to address potential problematic and inefficient market outcomes.[58]

34. CAISO represents that in designing its temporary modification provision, it was informed by Commission-approved tariff provisions from three other independent system operators and regional transmission organizations that permit them to make temporary

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[56] CAISO, CAISO eTariff § 31.4.1 Temporary Changes to Scheduling Run Parameter Values (3.0.0).

[57] Transmittal at 10.

[58] *Id*. at 11.

changes to the transmission constraint penalty factor values.[59] Moreover, CAISO states that its proposed Tariff revision meets the directive in Order No. 844 to include any procedures for temporarily changing its transmission constraint penalty factor values with "notice of the change to market participants."[60] Accordingly, CAISO states that the Commission should accept its proposal as just and reasonable.

b. Comments

35. DMM supports CAISO's proposal to establish Tariff authority to temporarily modify the numerical value of specific scheduling run parameters to prevent market outcomes that do not align with relative scheduling priorities assigned to different schedule types in the Tariff.[61] DMM states that the proposed Tariff revisions include the important provision that this will not authorize CAISO to change the numerical parameters in a way that changes the order of different schedule types in the Tariff. DMM also states that the proposed revisions also include the important provision that CAISO will notify market participants of any temporary change to Tariff-specified parameters within one business day of a change. DMM believes that the two provisions should ensure that CAISO only uses the proposed authority to help effectuate the intended market design.[62]

c. Commission Determination

36. We accept CAISO's proposed Tariff revisions to provide a new process to permit temporary changes to parameter values the CAISO market uses to reflect relative scheduling priorities and constraints in its scheduling optimization, subject to condition. We find that the proposed Tariff revisions provide CAISO with sufficient flexibility to avoid inefficient market outcomes and market participants with transparency into the

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[59] *Id*. at 10-11. *See* Midcontinent Independent System Operator, Inc., FERC Electric Tariffs, Schedule 28A (Demand Curves for Transmission Constraints), § 3.3 (Temporary Overrides) (32.0.0); New York Independent System Operator, Inc., NYISO Tariffs, Market Administration and Control Area Services Tariff, § 17.1.4 (Determination of Transmission Shortage Cost) (33.0.0); PJM Interconnection, LLC, Intra-PJM Tariffs, Open Access Transmission Tariff, attach. K (Appendix), § 5.6.3 (Modifications to Transmission Constraint Penalty Factor Values) (4.0.0).

[60] Transmittal at 11 (citing *Uplift Cost Allocation & Transparency in Mkts. Operated by Reg'l Transmission Orgs. & Indep. Sys. Operators*, Order No. 844, 163 FERC ¶ 61,041, at PP 121-22 (2018)).

[61] DMM Comments at 4.

[62] *Id*. at 5-6.

situations in which this flexibility is exercised.[63] Moreover, the proposed Tariff revisions do not authorize CAISO to change the scheduling run parameter values in a manner that changes the relative scheduling run priorities.[64] To be clear, these changes will be temporary, as explained by CAISO, in effect for no more than 90 days, and apply only to the penalty parameters used in the scheduling optimization as described in sections 31.4, 34.12.1, and 34.12.2.

37. We find that the proposed Tariff revisions are just and reasonable because they enumerate the procedures by which CAISO may temporarily change scheduling run parameter values and provide notice for temporarily changing its scheduling run parameter values to market participants as soon as practicable.[65] However, we direct CAISO to remove from the proposed Tariff section certain language concerning the process under which CAISO would make such temporary changes. Specifically, we find that the following text should be removed from the Tariff, as indicated by the strikethrough below:

> " . . . it may temporarily modify the value for a period up to ninety days~~, provided however CAISO will file such change with FERC under Section 205 of the Federal Power Act within thirty days of such modification~~. If circumstances reasonably allow, CAISO will consult with ~~FERC and the~~ CAISO's Market Monitoring Unit before implementing such modification."

38. The procedure described by the stricken language above is inconsistent with the notice requirement in section 205 of the FPA.[66] Informational filings made after temporary changes to scheduling run parameter values are implemented are not appropriately filed as tariff changes under section 205 of the FPA.[67] We therefore direct

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[63] *See, e.g.*, *Midcontinent Indep. Sys. Operator, Inc.*, 145 FERC ¶ 61,128, at P 23 (2013), *order on reh'g and compliance*, 148 FERC ¶ 61,005, at PP 18, 20 (2014).

[64] Transmittal at 11.

[65] Order No. 844, 163 FERC ¶ 61,041 at PP 121-22.

[66] 16 U.S.C. § 825d(d) ("Unless the Commission otherwise orders, no change shall be made by any public utility in any such rates, charges, classification, or service . . . except after sixty days' notice to the Commission and to the public.").

[67] *See* Midcontinent Independent System Operator, Inc., FERC Electric Tariffs, Schedule 28A (Demand Curves for Transmission Constraints), § 3.3 (Temporary Overrides) (32.0.0); PJM Interconnection, LLC, Intra-PJM Tariffs, Open Access Transmission Tariff, attach. K (Appendix), § 5.6.3 (Modifications to Transmission Constraint Penalty Factor Values) (4.0.0).

CAISO to submit a compliance filing within 30 days of the date of this order to remove the identified text from section 31.4.1 of its Tariff.

The Commission orders:

(A) CAISO's proposed Tariff revisions are hereby accepted in part, subject to condition, and rejected in part, effective as of the actual effective date, as discussed in the body of this order.

(B) CAISO is hereby directed to notify the Commission of the actual effective date of the revisions within five business days of the actual effective date, in an eTariff submittal using Type of Filing code 150 – Report.

(C) CAISO is hereby directed to submit a compliance filing, within 30 days of the date of issuance of this order, as discussed in the body of this order.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.