

165 FERC ¶ 61,050
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Cheryl A. LaFleur and Richard Glick.

California Independent System Operator Corporation Docket No. ER18-2341-000

ORDER ACCEPTING PROPOSED TARIFF REVISIONS

(Issued October 29, 2018)

1. On August 29, 2018, pursuant to section 205 of the Federal Power Act (FPA),¹ the California Independent System Operator Corporation (CAISO) filed revisions to its tariff related to the bid adder for the western Energy Imbalance Market (EIM) (August 29 Filing). Specifically, CAISO proposes to refine its market rules associated with EIM bid adders, which reflect an EIM participating resource's costs to comply with California's greenhouse gas (GHG) regulations, to limit the megawatt (MW) quantity of an EIM bid adder that can be used in the market optimization. As discussed below, we accept the proposed tariff revisions, effective November 1, 2018, as requested.

I. Background

2. CAISO operates the EIM, which enables entities with balancing authority areas outside of CAISO to buy and sell energy as part of CAISO's real-time market to satisfy energy imbalance needs.² CAISO explains that, in order to buy and sell energy through the EIM, EIM participants submit base schedules for each hour that demonstrate that their respective balancing authority area can meet certain resource sufficiency tests by independently serving the balancing authority area's load. These base schedules also serve as the reference point from which to measure and settle imbalance energy.³

¹ 16 U.S.C. § 824d (2012).

² EIM participants now include PacifiCorp, NV Energy, Arizona Public Service Company, Puget Sound Energy, Portland General Electric, Idaho Power Company, and Powerex Corp.

³ August 29 Filing at 1-2.

3. CAISO states that energy generated in California or imported into the state to serve California demand is subject to California's GHG regulations adopted by the California Air Resources Board (CARB). Under CARB's regulations, EIM participating resource scheduling coordinators are considered electricity importers if their resource(s) are dispatched to serve load within California. These entities have a GHG compliance obligation under CARB's GHG regulations and incur a compliance cost to produce power that is delivered to serve demand within California. To address CARB's regulations, CAISO explains that it developed a bid adder that would permit CAISO to reflect GHG compliance costs within locational marginal prices for EIM participating resources serving CAISO demand.⁴

4. Under CAISO's current tariff, EIM participating resource scheduling coordinators submit an hourly bid quantity to express how much of the resource's output could support an EIM transfer serving CAISO demand, and also an hourly price in its bid adder for each participating resource at or below the resource's daily maximum GHG cost cap as determined by CAISO, but not less than zero.⁵ EIM participating resource scheduling coordinators submit the EIM bid adder separately from their energy bids. According to CAISO, this design allows the CAISO market to identify a price difference for transactions serving CAISO demand versus transactions serving demand outside of CAISO. CAISO states that when dispatching resources to serve load outside of CAISO, the market optimization considers only the energy bid, but when dispatching resources to serve load inside CAISO, the market optimization considers the energy bid plus the EIM bid adder.⁶

5. CAISO explains that the submission of this bid adder is voluntary and reflects the willingness of EIM participating resource scheduling coordinators to serve demand in CAISO. Based on least cost dispatch methodology, EIM bid adders allow CAISO to attribute which EIM participating resources support EIM transfers to serve CAISO demand and compensate EIM participating resource scheduling coordinators for their costs of compliance as electricity importers under California's GHG regulations.⁷

6. CAISO states that stakeholders have raised concerns that CAISO's attribution of EIM transfers serving CAISO demand may not in all instances accurately reflect the incremental energy produced by EIM participating resources to serve CAISO demand.

⁴ *Id.* at 3.

⁵ *Id.* at 4.

⁶ *Id.* at 3.

⁷ *Id.*

Specifically, stakeholders expressed concerns that the market may designate a resource as supporting a transfer into CAISO even though the resource would have operated at the same output to serve load outside of CAISO without an energy transfer. According to CAISO, least cost dispatch has the effect of attributing EIM transfers to lower-emitting participating resources based on their combined energy bid and bid adder. Because of this, other higher-emitting resources are needed to backfill this attribution to serve demand in the EIM Entities' balancing authority areas. CAISO states that this concept is commonly referred to as "secondary dispatch."⁸

II. Instant Filing

7. To address these issues, CAISO proposes to revise its EIM bid adder rules by adding language to its tariff that limits the hourly MW quantity of an EIM bid adder to the EIM participating resource's dispatchable bid range between the resource's base schedule and its effective upper economic bid for the relevant operating hour.⁹ CAISO states this proposal will more accurately attribute energy produced by EIM participating resources, because it will limit the amount of a resource's output that can be designated as supporting a transfer into CAISO when the resource has already been scheduled to serve load outside of CAISO. CAISO further states that the proposal reflects that capacity associated with base schedules in advance of the real-time market is effectively committed to serve EIM load and meet specific resource sufficiency tests, and that this commitment creates a base from which the market can determine what incremental capacity a resource has available to serve load in the CAISO or other EIM Entity balancing authority areas located within California.¹⁰ CAISO also proposes minor clarifications to its EIM bid adder rules to reflect that the Sacramento Municipal Utility District (SMUD) will be joining the EIM in 2019.¹¹

⁸ *Id.* at 5.

⁹ CAISO Proposed Tariff section 29.32(b)(2). CAISO notes that in identifying the dispatchable bid range, the proposed rule would exclude derated capacity or capacity that is subject to an ancillary services reservation by the relevant EIM Entity, consistent with CAISO's current practice under the EIM bid adder rules.

¹⁰ *Id.* at 7. CAISO notes that the proposed changes modify the rules regarding the allowable input data into the market optimization, and do not require changes to CAISO least cost dispatch.

¹¹ *Id.* at 2.

8. CAISO notes that some stakeholders have observed that market participants could take steps, under this new proposal, to configure EIM participating resources' base schedules to maximize GHG revenue as opposed to the most optimal operation of their resources. While CAISO asserts that it does not think this outcome is likely because of EIM participating resources' financial disincentive to submit sub-optimal base schedules, CAISO states that it will monitor any changes to the formation of base schedules it observes after the proposed tariff revisions take effect and provide a report to stakeholders after obtaining six months of market data.¹²

9. CAISO requests that the revised tariff provisions be made effective on November 1, 2018. Additionally, CAISO requests that the Commission issue an order on its proposal by October 29, 2018 to provide sufficient time for CAISO to promote updates to its market systems and provide market participants with certainty regarding EIM rules in advance of the November 1, 2018 trade date.¹³

III. Notice and Responsive Pleadings

10. Notice of CAISO's filing was published in the Federal Register, 83 Fed. Reg. 45, 120 (2018), with interventions and protests due on or before September 19, 2018. Timely motions to intervene were filed by Idaho Power Company; PacifiCorp; the Cities of Anaheim, Azusa, Banning, Colton, Pasadena and Riverside, California; the American Wind Energy Association; Southern California Edison Company; Northern California Power Agency; and the Modesto Irrigation District. Timely motions to intervene and comments were filed by SMUD, the Department of Market Monitoring of the California Independent System Operator Corporation (DMM), Powerex Corp. (Powerex), and Pacific Gas and Electric Company (PG&E). A motion to intervene out-of-time was filed by the Cities of Santa Clara, California and Redding, California and the M-S-R Public Power Agency (Cities/M-S-R). On September 26, 2018, CAISO filed an answer to PG&E's and Powerex's comments.

Comments

11. SMUD, DMM, Powerex, and PG&E all support CAISO's proposed tariff revisions as an improvement over CAISO's existing tariff provisions. PG&E, however, requests that the Commission require CAISO to produce reports on an ongoing basis detailing the historic volume of emissions associated with secondary dispatch supporting

¹² *Id.* at 12.

¹³ *Id.* at 1, 12-13.

imported energy into California.¹⁴ PG&E also requests that the Commission require CAISO to provide data on the GHG benefits associated with reduced renewable curtailments to demonstrate the overall environmental benefits of EIM transfers.¹⁵ In a similar vein, Powerex asserts that it is critical that CAISO closely track and report on the secondary dispatch that may continue to occur in the EIM following the implementation of these tariff provisions. Powerex contends that tracking any continuing secondary dispatch will help inform assessments of whether enhancements are needed to the EIM algorithm or whether the Cap and Trade Program should be applied to the EIM differently in the future.¹⁶

12. DMM raises two main separate issues in its comments. First, DMM asserts that the potential for market participants to configure EIM participating resources' base schedules to maximize GHG revenue as opposed to the most optimal operation of their resources can be mitigated by CAISO's commitment, described above, to monitor and report on the issue. Second, DMM points to its comments filed in the stakeholder process cited in CAISO's filing, in which it identified scenarios where CAISO's proposal could reduce overall market efficiency.¹⁷ According to DMM, it may be possible to improve the efficiency of CAISO's proposal by identifying such scenarios and designing appropriate exceptions to the proposed administrative capacity limit, but it could take substantial effort to work out the implementation details of such enhancements. DMM concludes that given the complexity of such potential enhancements, it supports CAISO's decision to move forward with its proposal at this time, and asserts that any future enhancements could be made based on observed market outcomes.¹⁸

13. In its answer, CAISO asserts that the Commission should not impose on CAISO the reporting requirements requested by PG&E and Powerex. However, CAISO recognizes that this information may be useful to stakeholders and therefore commits to

¹⁴ PG&E Comments at 3.

¹⁵ *Id.* at 4.

¹⁶ Powerex Comments at 9-10.

¹⁷ DMM Comments at 2 (citing Comments on EIM Greenhouse Gas Enhancements Third Revised Draft Final Proposal, Department of Market Monitoring, June 14, 2018, at 3-4.) In those earlier comments, DMM noted that when demand in an EIM Entity area is lower than forecast in the base schedule, there could be additional transfer capacity available to serve California load beyond that reflected in the MW quantity captured by the EIM bid adder.

¹⁸ *Id.* at 2-3.

exploring the development of reports going forward to inform stakeholders of secondary dispatch and associated greenhouse gas emissions.¹⁹ CAISO states that these reports will be available to the public.²⁰

IV. Discussion

A. Procedural Matters

14. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2018), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

15. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2018), the Commission grants Cities/M-S-R's late-filed motion to intervene given its interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.

16. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2018), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We accept CAISO's answer because it has provided information that assisted us in our decision-making process.

B. Substantive Issues

17. We accept CAISO's proposed revisions, effective November 1, 2018, as requested. We find that CAISO's proposal will more accurately attribute EIM transfers to the actual generation being incrementally dispatched to serve California load and will reduce the attribution to CAISO load of EIM resources that would have generated even without CAISO load, as reflected in EIM base schedules. We thus find that the proposed revisions are just and reasonable.

18. We appreciate DMM's observation that market efficiency could potentially be impacted in instances where base schedule forecasts are greater than real time energy

¹⁹ CAISO notes that developing these reports will require collaboration with stakeholders to gain consensus on the concept of secondary dispatch and to determine the format and content of the reports. CAISO Answer at 2-3.

²⁰ *Id.* at 3.

need.²¹ In order to provide greater transparency to the market, we require CAISO to submit an informational report to the Commission on or before January 1, 2020.²² The report must describe the extent to which situations similar to the scenario described by DMM in its comments to CAISO's stakeholder process²³ materialize during the 12 months after the implementation of CAISO's tariff revisions.²⁴

19. We do not require, however, that CAISO report to the Commission on the magnitude of secondary dispatch that continues to occur and the historic and ongoing volume of emissions associated with such secondary dispatch as PG&E and Powerex request. Similarly, we do not find it necessary to require CAISO to continue to provide data on the GHG benefits of reduced renewable curtailments to demonstrate the overall environmental benefits of EIM transfers. The reports that PG&E and Powerex request are focused on compliance with current and potential future CARB regulations

²¹ DMM Comments at 2 (citing Comments on EIM Greenhouse Gas Enhancements Third Revised Draft Final Proposal, Department of Market Monitoring, June 14, 2018, at 3-4.)

²² This report will not be noticed for comment or require Commission action.

²³ See Comments on EIM Greenhouse Gas Enhancements Third Revised Draft Final Proposal, Department of Market Monitoring, June 14, 2018, at 3-4 (example under heading "ISO's proposal can limit EIM benefits by limiting transfers into California"); see also DMM Comments at 2.

²⁴ We expect the informational report to include instances in which: (1) an EIM participating resource offered capacity as eligible to serve California load (i.e., included an EIM bid adder for those MWs), equal to the difference between the resource's base schedule and the resource's effective upper economic bid; (2) for a particular 15 minute market interval, the balancing authority area in which the EIM participating resource is located had a real-time load less than was forecasted in the EIM balancing authority area's base schedule; (3) the EIM participating resource was dispatched to serve native load at a lower level than what was anticipated in the base schedule; and (4) any remaining capacity from the EIM participating resource that otherwise could have been economically dispatched was not dispatched while a more expensive resource was dispatched instead, thereby reducing market efficiency. We also acknowledge CAISO's commitment that it will monitor any changes to the formation of base schedules by market participants designed to maximize GHG revenue as opposed to the most optimal operation of their resources and will report to stakeholders. See *supra* P 8.

regarding GHG emissions, and are not necessary to assess the justness and reasonableness of CAISO's proposal. Accordingly, we deny PG&E's and Powerex's requests. Nevertheless, we accept CAISO's commitment to work with stakeholders to develop and make publicly available reports going forward on secondary dispatch and associated greenhouse gas emissions.²⁵

The Commission orders:

(A) CAISO's proposed tariff revisions are hereby accepted, effective November 1, 2018, as requested, as discussed in the body of this order.

(B) CAISO is directed to file an informational report with the Commission on or before January 1, 2020, as discussed in the body of this order.

By the Commission. Commissioner McIntyre is not voting on this order.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

²⁵ CAISO Answer at 3.