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UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Cheryl A. LaFleur, Acting Chairman;
Philip D. Moeller, John R. Norris,
and Tony Clark.

California Independent System
Operator Corporation

Docket No. ER14-1386-000

ORDER CONDITIONALLY ACCEPTING PROPOSED TARIFF REVISIONS TO
IMPLEMENT ENERGY IMBALANCE MARKET

(Issued June 19, 2014)

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1. In this order, the Commission addresses proposed tariff revisions submitted by the California Independent System Operator Corporation (CAISO) to offer participation in the imbalance energy portion of its real-time market to other balancing authority areas (BAA) in the Western states.
2. Under the proposed Energy Imbalance Market (EIM) tariff provisions, participating entities will be able to purchase and sell five-minute real-time energy, under a market-driven regime for meeting energy imbalance needs. Entities within BAAs outside of CAISO may sign service agreements to take part in the imbalance energy portion of the CAISO real-time energy market alongside participants from within the CAISO BAA.¹ Participation in the EIM is voluntary and there is no exit fee for leaving the market. CAISO will run its market software to economically dispatch the energy system of any BAA that joins the EIM (an EIM Entity).² This will allow for optimization of imbalance energy across the broader EIM footprint to the extent that transmission between an EIM Entity and CAISO, or among EIM Entities, is available. The CAISO EIM tariff provisions do not propose any changes to the current North American Electric Reliability Corporation (NERC)-registered reliability functions for CAISO or EIM Entities such as PacifiCorp.

I. Background

3. The Commission requires public utility transmission providers to offer energy imbalance service to transmission customers and generators as ancillary services under the *pro forma* open access transmission tariff (OATT).³ In addition, balancing authorities

¹ An order on PacifiCorp's Filing of proposed revisions to its tariff to enable participation in the EIM is being issued concurrently in Docket No. ER14-1578-000.

² The proposed tariff defines a balancing authority that opts to participate as an EIM Entity. See CAISO Tariff, proposed Appendix A (Master Definition Supplement).

³ See *Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities and Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, Order No. 888, FERC Stats. & Regs. ¶ 31,036, at 31,705 (1996) (Order No. 888), *order on reh'g*, Order No. 888-A, FERC Stats. & Regs. ¶ 31,048, *order on reh'g*, Order No. 888-B, 81 FERC ¶ 61,248 (1997), *order on reh'g*, Order No. 888-C, 82 FERC ¶ 61,046 (1998), *aff'd in part and rev'd in part sub nom. Transmission Access Policy Study Group v. FERC*, 225 F.3d 667 (D.C. Cir. 2000), *aff'd sub nom. New York v. FERC*, 535 U.S. 1 (2002); *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, FERC Stats. & Regs. ¶ 31,241, *order on reh'g*, Order No. 890-A, FERC Stats. & Regs. ¶ 31,261 (2007), *order on reh'g*, Order No. 890-B, 123 FERC ¶ 61,299 (2008), *order on reh'g*, Order

(continued...)

are responsible for maintaining balance between supply and demand in their areas. CAISO states that, as a transmission provider and balancing authority, it fulfills these responsibilities through its operation of an automated, bid-based, real-time energy market, which determines the most economic commitment and dispatch of resources, taking into account system constraints.⁴ CAISO settles the real-time market using locational marginal prices (LMPs) that reflect the energy clearing prices, the marginal cost of congestion, and the marginal cost of losses at the delivery location.

4. In other BAAs in the West, each utility largely maintains balance between supply and demand on an individual basis through the manual dispatch of generating resources available to it. For several years, industry leaders in the West have examined the potential benefits of a regional energy imbalance market that could replace the energy imbalance services that utilities in the region currently offer under schedules 4 and 9 of their respective OATTs. CAISO and PacifiCorp⁵ studied the benefits of an energy imbalance market between their BAAs.⁶ The study projected annual economic benefits of between \$21 and \$129 million, with benefits for customers resulting from economic efficiencies, improved renewable integration, and increased reliability.

5. Following the EIM Benefits Study, CAISO and PacifiCorp executed a memorandum of understanding in February 2013 to begin development of a regional real-time energy imbalance market by October 2014. On June 28, 2013, the Commission approved an implementation agreement between CAISO and PacifiCorp to establish the

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

⁴ CAISO Transmittal Letter at 5.

⁵ PacifiCorp operates two BAAs, PacifiCorp East and PacifiCorp West. As proposed, both BAAs would be the initial participants in the proposed EIM. *Id.* at 6 n.7. NV Energy, Inc. also has announced its intent to join the EIM, subject to the approval of the Public Utilities Commission of Nevada. *Id.* at 7 n.11. The Commission accepted the implementation agreement between CAISO and NV Energy setting forth the terms under which NV Energy, Inc. will participate in the EIM on June 13, 2014. *Cal. Indep. Sys. Operator Corp.*, 147 FERC ¶ 61,200 (2014).

⁶ See Energy and Environmental Economics, Inc., *PacifiCorp – ISO Energy Imbalance Market Benefits* (Mar. 13, 2013) (EIM Benefits Study), which is provided in Attachment E to CAISO's Transmittal Letter and is available on the CAISO website at <http://www.caiso.com/Documents/PacifiCorp-ISOEnergyImbalanceMarketBenefits.pdf>.

scope and schedule of implementing the energy imbalance market service and to account for PacifiCorp's upfront costs.⁷

6. CAISO's current proposal utilizes its existing real-time market by adding new procedures to accommodate the voluntary participation of other balancing authorities.⁸ Specifically, to implement the new EIM, CAISO proposes the following tariff amendments: (1) a new section 29 of the tariff with provisions specific to the EIM; (2) new definitions specific to the EIM in Appendix A; (3) revisions to existing tariff provisions and definitions necessary to accommodate the EIM; and (4) new *pro forma* agreements in Appendix B for use by participants in the EIM. CAISO requests a July 1, 2014 effective date with respect to the various agreements to be executed by participants in the EIM and a September 23, 2014 effective date for the proposed tariff revisions, so that necessary advance data submissions may be made prior to the EIM's anticipated October 1, 2014 start date.

II. CAISO Filing

A. Overview

7. According to CAISO, the proposed EIM does not represent a new market. CAISO explains that the proposed tariff revisions do not change the actual operation of the real-time market; they expand the market to cover a broader geographical scope and to involve a larger number of participants than is currently the case.⁹ CAISO asserts that the proposal takes advantage of its successful existing real-time market by adding new procedures to accommodate the voluntary participation of other balancing authorities without disrupting the current market structure.¹⁰ CAISO claims that the proposed

⁷ *California Indep. Sys. Operator Corp.*, 143 FERC ¶ 61,298 (2013).

⁸ The EIM builds upon CAISO's recent introduction of a 15-minute market, in response to Order No. 764. *Integration of Variable Energy Resources*, Order No. 764, FERC Stats. & Regs. ¶ 31,331 (Order No. 764), *order on reh'g and clarification*, Order No. 764-A, 141 FERC ¶ 61,232 (2012), *order on clarification and reh'g*, Order No. 764-B, 144 FERC ¶ 61,222 (2013). *See also Cal. Indep. Sys. Operator Corp.*, 146 FERC ¶ 61,205 (2014) (accepting CAISO's Order No. 764 compliance filing, subject to further modification).

⁹ CAISO Transmittal Letter at 14.

¹⁰ *Id.* at 2.

procedures accommodate balancing authorities whose operations in advance of real-time operations (i.e., day-ahead and other forward operations) differ from CAISO's day-ahead market.¹¹

8. As noted above, participation in the EIM is voluntary both for balancing authorities and for individual resource owners within a participating BAA. According to CAISO, a balancing authority's decision to participate in the EIM does not involve "joining" CAISO on either a full or limited basis.¹² CAISO also will not assume operational control over the transmission facilities in the BAA, except to the extent a transmission owner or rights holder may have separately placed a facility or entitlement under CAISO's operational control.¹³

9. CAISO notes that each balancing authority that chooses to participate in the EIM will remain responsible for maintaining the reliability of its BAA, including meeting operating reserve and capacity requirements, scheduling, and curtailment of the transmission facilities under its operational control, and manually dispatching resources out-of-market to maintain reliability. CAISO states that it will financially settle the EIM in a manner that appropriately recognizes the costs attributable to each participating BAA. The participating balancing authorities then will be responsible for allocating these amounts according to their respective OATTs to their transmission customers that are not EIM participants.¹⁴

10. Each interested balancing authority must enter into an implementation agreement with CAISO, establishing an implementation date and fee consistent with CAISO's expected implementation costs with respect to such balancing authority. Each implementation agreement will be separately filed with the Commission.¹⁵ In order for balancing authorities to implement the EIM in their BAAs, it may be necessary for the

¹¹ *Id.* at 2-3.

¹² *Id.* at 10.

¹³ *Id.* Similarly, a balancing authority's participation in the EIM does not, in itself, provide the opportunity to participate in other CAISO markets, including CAISO's ancillary service market and day-ahead energy market, and PacifiCorp does not currently propose to participate in these other markets.

¹⁴ *Id.* at 3.

¹⁵ *Id.* at 11.

balancing authorities to include specific EIM implementation, cost recovery, and operational requirements in their OATTs.¹⁶

11. Transmission access to the EIM will be provided under the applicable transmission service providers' tariffs. CAISO will dispatch transfers between BAAs participating in the EIM using transmission rights specifically made available for that purpose. CAISO asserts that these transfers will not use the rights of non-participants. A transmission service provider, customer, or rights holder within an EIM Entity's BAA may make its transmission rights on interties, including transmission rights it may have outside of the EIM Entity's BAA, available for use in the EIM.¹⁷ The EIM processes will allocate any such transfer capacity made available on an economic basis.

12. CAISO proposes that there will be no incremental transmission charge for the use of transmission to support EIM transfers between participating BAAs. CAISO states that within the first year of operation, it will consider, in consultation with stakeholders, whether to continue this arrangement.¹⁸

13. Similarly, termination of participation in the EIM will not be subject to an exit fee because the balancing authority would have paid its startup costs under the implementation agreement and its ongoing costs under the tariff and associated agreements. Accordingly, an EIM Entity that wishes to terminate participation in the EIM need only provide CAISO with at least six months' advance written notice. Although there is no exit fee, the EIM Entity will remain responsible for charges and financial obligations incurred during the term of its participation.¹⁹

14. According to CAISO, the proposal also recognizes the need for resources that serve load in California through the EIM to comply with California's greenhouse gas (GHG) cap and trade regulations. CAISO asserts that it will allow resources selling into California as a result of bidding supply into the EIM to include the costs of compliance in their energy bids and will incorporate this cost into its dispatch of generation as

¹⁶ *Id.* at 10.

¹⁷ *Id.* at 12. According to CAISO, PacifiCorp has indicated that its marketing function, PacifiCorp Energy, which holds transmission rights on facilities connecting CAISO and the PacifiCorp BAAs, intends to make those rights available for the EIM transfers at no charge.

¹⁸ *Id.* at 4.

¹⁹ *Id.* at 13 (citing CAISO Tariff, proposed section 29.4(b)(4)).

appropriate. CAISO further states that it will not consider this cost when it dispatches generation that is attributable to serving load outside the CAISO BAA and therefore, CAISO claims that GHG regulation compliance costs will not affect locational prices outside the CAISO BAA.²⁰

15. CAISO also notes that it will use a process based on its existing local market power mitigation approach—which mitigates bids which might have an effect on prices at transmission constraints deemed non-competitive via CAISO’s dynamic competitive path assessment—to mitigate market power in each BAA participating in the EIM, and will monitor and assess the need for market power mitigation at the interties before and after implementation.²¹

16. Finally, the proposed revisions grant CAISO the short-term authority to suspend certain operations in the event of unforeseen circumstances. With each addition of an EIM Entity to the EIM, there will be a 60-day period during which CAISO may temporarily discontinue the participation of the new balancing authority in the real-time market if system operational issues adversely affect any portion of the market’s operation in the combined BAAs. If CAISO identifies a solution to the issues within 60 days of the temporary discontinuation, it may reinstate the normal operations upon five days’ notice. If it does not identify the solution in this period, CAISO will terminate the participation of the new EIM Entity. The terminated balancing authority can then only be reinstated by a Commission order.²²

B. Market Design

17. CAISO explains that the structural differences between the CAISO BAA and other participating BAAs necessitate a supplemental set of rules and procedures to allow entities outside CAISO’s BAA to serve their imbalance needs through participation in CAISO’s real-time market.²³ For example, inputs to the real-time market for the energy needs of the CAISO BAA, such as day-ahead schedules from the day-ahead market, ancillary services awards, and capacity procurement mechanism designations, do not

²⁰ *Id.* at 3-4.

²¹ *Id.* at 3.

²² *Id.* at 14 (citing CAISO Tariff, proposed section 29.1).

²³ *Id.* These rules and procedures are included in proposed section 29 of CAISO’s tariff.

apply to entities outside the CAISO BAA.²⁴ In addition, CAISO balancing authority responsibilities and emergency dispatch authority are limited to the CAISO BAA.

C. Roles within the EIM

18. The EIM introduces four new types of participants in the real-time market, collectively known as “EIM Market Participants”: EIM Entity, EIM Entity Scheduling Coordinator, EIM Participating Resource, and EIM Participating Resource Scheduling Coordinator.²⁵ All EIM Market Participants must comply with the CAISO tariff to the extent that its provisions are relevant to participation in CAISO’s real-time market. Thus, according to CAISO, the market rules unique to the EIM are integrated with the remainder of the CAISO tariff, thereby ensuring comparable treatment with other CAISO market participants.²⁶

19. Proposed section 29.2 of the CAISO tariff sets forth the process for a balancing authority to become an EIM Entity.²⁷ An EIM Entity is responsible for identifying available transmission capacity in its BAA for use in the EIM and, through its EIM Entity Scheduling Coordinator, for scheduling all load and resources in its BAA that do not participate in the EIM (known as non-participating load and non-participating resources) and for settling non-EIM charges and payments related to non-participating load and non-participating resources. The EIM Entity is also responsible for recovering its costs associated with payments to CAISO through its OATT.

20. An EIM Entity Scheduling Coordinator is the entity through which an EIM Entity participates in the EIM. In order to prevent the inappropriate sharing of information regarding transmission and generation, an EIM Entity Scheduling Coordinator cannot be a scheduling coordinator for a supply resource unless it is a transmission provider subject to the Commission’s standards of conduct set forth in the Commission’s regulations.²⁸

²⁴ *Id.* at 13.

²⁵ CAISO Tariff, proposed section 29.4.

²⁶ CAISO Transmittal Letter at 15.

²⁷ *Id.* (citing CAISO Tariff, proposed section 29.2(b)).

²⁸ *Id.* (citing 18 C.F.R. § 358 (2013)).

21. EIM Participating Resources are the owners or operators of resources that wish to bid supply into the EIM. These resources can be generating units, participating load, demand resource providers, or other resources qualified to deliver energy or similar services, such as non-generation resources. Each type of resource that is eligible to participate in the current CAISO real-time market is eligible to participate through the EIM,²⁹ but only if the EIM Entity supports participation by that type of resource and the resource meets the technical requirements for such participation pursuant to the terms and conditions of the CAISO tariff and the EIM Entity's OATT.

22. An EIM Participating Resource Scheduling Coordinator is the entity through which an EIM Participating Resource participates in the real-time market. Similar to CAISO's proposal with regard to the EIM Entity Scheduling Coordinator, to prevent the inappropriate sharing of information regarding transmission and generation, an EIM Participating Resource Scheduling Coordinator cannot be an EIM Entity Scheduling Coordinator unless it is a transmission provider subject to the Commission's standards of conduct set forth in the Commission's regulations.³⁰

23. Finally, to participate in the real-time market through the EIM, each entity described above must enter into an agreement with CAISO that sets out the parties' respective obligations with respect to the entity's role.³¹ CAISO includes the proposed *pro forma* EIM Entity Agreement, EIM Entity Scheduling Coordinator Agreement, EIM Participating Resource Agreement, and EIM Participating Resource Scheduling Coordinator Agreement (collectively, the EIM Service Agreements) as proposed Appendices B.17, B.18, B.19, and B.20 of its tariff.

D. Communications

24. Under proposed section 29.6 of the CAISO tariff, an EIM Entity must meet certain technical requirements of the Inter-Control Center Communication Protocol and Reliability Standards to enable communications with CAISO necessary to support market operations.³² Proposed section 29.6 also provides for the development of procedures to

²⁹ I.e., resources capable of delivering energy, curtailable demand, demand response services, or similar services. *See* CAISO Tariff, proposed section 29.4(d)(1)).

³⁰ CAISO Transmittal Letter at 15.

³¹ *Id.* at 16.

³² *Id.* According to CAISO, it intends to publish supporting details for these technical requirements in the business practice manual for the EIM that it is currently developing and plans to publish prior to the planned July 8, 2014 market simulation.

address loss of communications and affirms that in such a circumstance, the EIM Entity remains responsible for managing its imbalance energy without the EIM. Proposed section 29.6 also requires EIM Market Participants to comply with the existing communications requirements in section 6 of CAISO's tariff in connection with their participation in the EIM.³³

25. Finally, CAISO proposes that the provisions of current section 6 regarding publication of market results will apply to results from the expanded real-time market under section 29.6. Thus, for the EIM, CAISO will publish the same results it currently publishes for the existing real-time market. CAISO will make the non-public information that it specifically makes available to individual market participants under section 6 available to EIM Market Participants in a similar manner as in its existing real-time market.³⁴

E. Market Operations

26. CAISO asserts that under the EIM, it will not be assuming operational responsibility for the transmission systems in EIM Entities' BAAs. Therefore, proposed section 29.7 provides that CAISO will administer the transmission made available to the real-time market to manage energy imbalances in the EIM area under normal conditions. This section also provides that CAISO will not issue dispatch instructions to load that has not been bid into the market.³⁵

27. Proposed section 29.7 also provides special procedures for the management of EIM transfers, which involve transfers from one EIM Entity BAA to another through the EIM. Specifically, EIM transfers will not require individual resource e-Tags; will not constitute inadvertent energy; will reflect intra-hour incremental EIM transfers between CAISO and each EIM Entity BAA; will be updated within 60 minutes after the end of each operating hour to include the sum of all EIM transfers within each BAA for purposes of inadvertent energy accounting; and will subsequently be updated as necessary consistent with the requirements of the Western Electricity Coordinating Council (WECC), NERC, and North American Energy Standards Board standards and

³³ *Id.* at 17. CAISO notes that requirements in section 6 applicable only to communications regarding such matters as ancillary services and the day-ahead market do not apply to EIM Market Participants because the EIM does not include those features.

³⁴ *Id.*

³⁵ *Id.* at 17-18.

business practices. CAISO states that it will model changes in the net scheduled EIM transfers that result from real-time dispatch as dynamic schedules between CAISO and the relevant EIM Entity for the accuracy of automatic generation control and derive from the dynamic net scheduled EIM transfers the dynamic schedules on interties between CAISO and the EIM Entity for tagging purposes. According to CAISO, these provisions separate EIM transfers from normal interchange accounting among balancing authorities.³⁶

28. CAISO explains that proposed section 29.7 recognizes the authority of the EIM Entity to issue “exceptional dispatch” instructions³⁷ (defined as “EIM Manual Dispatches” in the proposed tariff revisions) when necessary to address reliability or operational issues in such EIM Entity’s BAA.³⁸ According to CAISO, the EIM Entity must immediately inform CAISO of such dispatches and identify the resources that have been manually dispatched. CAISO also notes that the EIM Entity remains responsible for communications to the reliability coordinator with respect to its BAA. When an EIM Entity informs CAISO that it has issued an EIM Manual Dispatch, CAISO will reflect the change in the 15-minute schedules and five-minute dispatch. CAISO will not include the EIM Manual Dispatch in the determination of LMPs, but it will settle the EIM Manual Dispatch at the price for instructed imbalance energy in the appropriate real-time market.

29. Proposed section 29.7 also provides that CAISO may declare an interruption of the EIM in circumstances that are analogous to a system emergency in the CAISO BAA or when a disruption of communications prevents EIM Market Participants from receiving information from, or submitting information to, CAISO. In response, CAISO states that it may isolate the affected area, curtail EIM transfers, transfer dispatch responsibility for the affected area to another balancing authority, establish an administrative price, or remove bids in accordance with its existing real-time market authority. According to CAISO, during the interruption, balancing authorities in the EIM area must follow applicable NERC standards, and their scheduling coordinators must keep CAISO informed of actions taken by the balancing authority. CAISO asserts that it will reinstate normal operations once it determines that the disruption has been resolved.³⁹

³⁶ *Id.* at 18.

³⁷ “Exceptional dispatch” instructions are used to address circumstances under which reliability or operational issues require CAISO to dispatch resources outside of the market. *Id.*

³⁸ *Id.*

³⁹ *Id.* at 19.

30. Finally, section 29.7 addresses congestion management and unscheduled flows. CAISO notes that ordinarily it will manage congestion through the EIM. However, according to CAISO, certain factors, such as the amount of transfer capacity available to the market, may limit CAISO's ability to fully manage congestion throughout the EIM area. If this occurs, CAISO states that it will inform other balancing authorities in the EIM area when it is unable to resolve congestion in their areas. In addition, CAISO notes that it or another balancing authority in the EIM area may initiate WECC's Unscheduled Flow Mitigation Plan when appropriate. At this point, the balancing authority must adjust its schedules according to the procedure and inform CAISO, which will incorporate the schedules in the real-time market.⁴⁰

31. According to CAISO, even though it is not controlling outages, CAISO must have information about outages in order to operate the real-time market efficiently. Therefore, proposed section 29.9 of the CAISO tariff requires the EIM Entity Scheduling Coordinators to provide CAISO the same type of information regarding generator and transmission maintenance outages that participating transmission owners and participating generators provide CAISO when seeking approval of outages. Section 29.9 also requires EIM Entity Scheduling Coordinators to comply with the communications and information requirements in CAISO tariff section 9 regarding forced outages, and allows updates to outage information consistent with sections 9 and 29.9.⁴¹

32. Proposed section 29.10 of the CAISO tariff requires the EIM Entity to ensure that all EIM Participating Resources and non-participating resources in the EIM Entity BAA become either a CAISO metered entity or a scheduling coordinator metered entity. Therefore, all EIM Participating Resources and non-participating resources in the EIM Entity BAA will be subject to all CAISO metering requirements in section 10 of CAISO's tariff applicable to such entities. Additionally, each EIM Participating Resource and non-participating resource in an EIM Entity's BAA that is not a generating unit, or is a generating unit with a rated capacity of 10 megawatts (MW) or greater, and each EIM intertie must have telemetry meeting the requirements of the business practice manual for the EIM.⁴²

⁴⁰ *Id.* at 19-20.

⁴¹ *Id.* at 20. Section 29.9 also requires the EIM Entity Scheduling Coordinator to inform CAISO of physical limits under the base case and contingencies, scheduling limits for intertie transactions based on e-Tags, and any contractual limits on interfaces where the EIM Entity has transmission rights.

⁴² *Id.* at 20-21.

33. Finally, proposed section 29.10 also requires metering for all interties between EIM Entities and other BAAs for purposes of calculating unaccounted for energy. EIM Entity Scheduling Coordinators also must submit to CAISO, for each bid for an intertie with a BAA outside the EIM that clears the 15-minute market, the corresponding hourly transmission profile and 15-minute energy profiles from the respective e-Tags at least 20 minutes before the start of the operating hour. According to CAISO, this information determines the net interchange for operation and settlement of the EIM.⁴³

F. Market Processes

34. CAISO proposes to incorporate the EIM into the operation of the real-time market in accordance with section 34 of its tariff. CAISO also proposes that its tariff provisions governing markets and process⁴⁴ and the provisions governing bid and self-schedule submission⁴⁵ applicable to the real-time market apply as well to EIM Market Participants. However, according to CAISO, certain variations from the requirements of these sections are necessary to permit seamless real-time market participation by EIM Market Participants, particularly because they do not participate in other CAISO markets and are located outside the CAISO BAA.⁴⁶

1. Timeline

35. Under CAISO's proposal, the EIM participation process begins with preparation of demand forecasts. CAISO will prepare mid-term (seven-day) and short-term (four-and-one-half hour) demand forecasts.⁴⁷ CAISO notes that the EIM Entity has the option of using CAISO's demand forecast or one of its own. However, if the EIM Entity elects

⁴³ *Id.*

⁴⁴ *See* CAISO Tariff, section 27.

⁴⁵ *See id.*, section 30.

⁴⁶ CAISO Transmittal Letter at 22-23. CAISO notes, for example, that EIM Market Participants may not submit inter-scheduling coordinator trades under existing section 28 of CAISO's tariff or participate in the day-ahead market unless they are otherwise eligible to do so under CAISO's current tariff. *See id.* at 23 n.40; CAISO Tariff, proposed sections 29.28 and 29.31.

⁴⁷ *See id.*, proposed section 29.34(d).

to use its own demand forecast, it may be subject to under-scheduling or over-scheduling charges.⁴⁸

36. CAISO states that its day-ahead operations currently provide the baseline for the operation of the real-time market within CAISO. According to CAISO, the EIM resource plan will serve that purpose with regard to other BAAs participating in the EIM. CAISO asserts that the EIM resource plan will present the complete picture of each EIM Entity's circumstances prior to real-time operations and will be comprised of EIM base schedules; energy bids (applicable to EIM Participating Resources only); reserve capacity meeting the WECC requirements for regulating reserves, in incremental MW (applicable to resources only); reserve capacity meeting the WECC requirements for regulating reserves, in decremental MW (applicable to resources only); spinning reserves in MW; non-spinning reserves in MW; and, if the EIM Entity Scheduling Coordinator is not relying on CAISO's demand forecast, a demand forecast. CAISO contends that this resource plan sets forth the base schedules that allow CAISO to run a power flow analysis in parallel with CAISO's day-ahead market, putting EIM Market Participants on an "equal footing" with day-ahead market participants going into real time. Moreover, CAISO asserts that it also allows the EIM Entity to review the results and consider what base schedule changes may be appropriate to meet its BAA needs.⁴⁹

37. CAISO states that the EIM base schedule represents the financially binding starting point in the real-time market and must reflect the demand forecast for the EIM Entity BAA. According to CAISO, each EIM Participating Resource must also submit a base schedule, which must be within the bid range included in the EIM resource plan. To determine if supply is sufficient, CAISO will use the EIM Entity base schedule for non-participating resources and the bid ranges of EIM Participating Resources. Next, CAISO will use the sum of the highest quantity offers from the bid range in determining whether there is insufficient supply and the lowest quantity bids in determining whether there is excess supply.⁵⁰

38. Next, all EIM scheduling coordinators must provide EIM base schedules for real-time operations at least 75 minutes before the start of the operating hour and will have two opportunities to revise the schedule. In addition, EIM Entity Scheduling Coordinators must submit EIM interchange schedules with other BAAs at the relevant EIM interties and must update these EIM intertie schedules with any adjustments, when

⁴⁸ CAISO Transmittal Letter at 23.

⁴⁹ *Id.* at 23.

⁵⁰ *Id.* at 23-24.

applicable, as part of the hourly resource plan revision. CAISO will derive an initial EIM base schedule for each EIM Entity's load from the CAISO demand forecast for the EIM Entity BAA, estimated transmission losses, and an assumed load distribution.⁵¹

39. According to CAISO, it will validate the EIM resource plan on the day before the operating day, and following the submission of EIM base schedules or adjustments to EIM base schedules. CAISO then will notify the EIM Entity Scheduling Coordinator if: (1) the EIM resource plan is not balanced; (2) the EIM resource plan provides insufficient flexible ramping capacity to meet requirements; and (3) CAISO anticipates congestion based on the submitted EIM resource plans. CAISO notes that if supply in the EIM base schedules is insufficient to meet the demand forecast, CAISO will reduce the demand in the EIM base schedule, which will result in the shortfall being settled through the EIM unless adjusted by the EIM Entity Scheduling Coordinator through this iterative process.⁵²

40. According to CAISO, EIM Participating Resource Scheduling Coordinators must submit energy bids in accordance with the same schedule that applies to other supply resources in the real-time market. CAISO notes that an EIM Participating Resource Scheduling Coordinator may also bid an EIM intertie schedule between the EIM Entity and a neighboring BAA into the 15-minute market if both BAAs support economic bidding of 15-minute schedules.⁵³

G. Market Actions

41. According to CAISO, section 34 of its current tariff will govern operation of the EIM in the EIM area. However, proposed section 29.34 of the tariff supplements section 34 with matters specific to the expansion of the EIM to other BAAs that participate in the EIM.

42. For example, under proposed section 29.34, if an EIM Entity Scheduling Coordinator's approved EIM resource plan does not have sufficient bids to resolve congestion, CAISO will relax the relevant transmission constraints when clearing the market. According to CAISO, if it cannot resolve congestion through that process, the

⁵¹ *Id.* at 24. See CAISO Tariff, proposed sections 29.34(i)(1), 29.34(g), and 29.34(j).

⁵² CAISO Transmittal Letter at 24. See CAISO Tariff, proposed section 29.34(k).

⁵³ CAISO Transmittal Letter at 25. See CAISO Tariff, proposed sections 29.34(h) and 29.34(i)(2).

EIM Entity will become responsible for managing its congestion through other means, such as EIM Manual Dispatch. CAISO states that it will determine prices for congestion consistent with transmission constraint relaxation parameters established in the business practice manual for the EIM until the constraint is no longer binding in the real-time market.⁵⁴

43. According to CAISO, proposed section 29.34 also establishes procedures for addressing flexible ramping constraints. CAISO explains that it will establish a flexible ramping constraint capacity requirement for each EIM Entity BAA using the CAISO demand forecast and the CAISO variable energy resource forecast for each BAA in the EIM area and each combination of balancing authorities. CAISO will then review EIM resource plans to determine if there are sufficient bids to meet those requirements, in each case according to procedures in the business practice manual for the EIM. CAISO states that it will reduce the requirement for each participating balancing authority by its *pro rata* share of a calculated “diversity benefit,” which may be limited by the available net import EIM transfer capability into the BAA.⁵⁵

44. CAISO asserts that if its review determines that the EIM resource plan includes insufficient flexible ramping constraint capacity, CAISO will not include the EIM Entity BAA in any flexible ramping constraints for combinations of BAAs. Instead, CAISO will formulate only individual constraints for the EIM Entity BAA and will hold the EIM transfer limit into the EIM Entity BAA at the value for the last 15-minute interval. This prevents balancing authorities with insufficient ramping capacity from “leaning” on those balancing authorities that have sufficient ramping capacity.⁵⁶

45. Finally, under the proposal, each EIM Entity is responsible for its operating reserves (or its share of required operating reserves under the terms of a reserve-sharing group agreement), and is responsible for deploying operating reserves. According to CAISO, the EIM Entity must immediately inform CAISO of any contingency that causes changes in the EIM base schedule or the dispatch of reserves. The EIM Entity Scheduling Coordinator also must include any deployed reserves, if time permits, in the EIM base schedule, or otherwise in EIM Manual Dispatch instructions. CAISO notes that the EIM Entity must also adjust the EIM base schedule to reflect any changes in the response to the contingency. According to CAISO, it will continue to send dispatch

⁵⁴ CAISO Transmittal Letter at 27 (citing CAISO Tariff, proposed section 29.34(o)).

⁵⁵ *Id.* at 28.

⁵⁶ *Id.*

instructions based upon pre-contingency conditions until CAISO receives resource operating limit updates. After CAISO receives the updates and reflects them in real-time dispatches, CAISO will account for the dispatches in providing net scheduled interchange data to the EIM Entity Scheduling Coordinators.⁵⁷

H. Settlement and Accounting

46. CAISO proposes to use the settlements procedures and timelines set forth in CAISO tariff section 11 and proposed section 29.11 for settling and billing EIM Market Participants. CAISO notes that it has included all charges that it will bill to EIM Market Participants in section 29.11. According to CAISO, the charges described in section 29.11 generally are associated with the participation of EIM Market Participants in the real-time market. CAISO states that it will allocate charges attributable to non-participating load and non-participant resources to the EIM Entity Scheduling Coordinator for allocation to such load and resources. CAISO notes that some of these charges affect cost allocation with CAISO market participants and accordingly are included in section 11.⁵⁸

47. According to CAISO, it will determine unaccounted for energy for each EIM Entity BAA as the difference between metered demand and the sum of the metered supply and the metered values at the interties, adjusted for losses. CAISO will charge the EIM Entity Scheduling Coordinator for unaccounted for energy at the hourly real-time load aggregation point price.⁵⁹

48. CAISO notes that it will assess under-scheduling and over-scheduling charges to EIM Market Participants to encourage resource sufficiency. CAISO will assess the charges in two levels, according to the deviations from the EIM base schedule: (1) if metered demand deviates from the schedule by between five to ten percent (level 1); and (2) if metered demand deviates from the schedule by more than ten percent (level 2). If the deviation within either range is at least two megawatts, the following charges apply: the level 1 charge will be a 25 percent increase (under-scheduling) or decrease (over-scheduling) of the hourly real-time load aggregation point price for the entire deviation; the level 2 charge will be a 100 percent increase or 50 percent decrease. CAISO will distribute the revenues from these charges *pro rata* to load in the EIM area that was not subject to penalties. CAISO asserts that EIM Entities that use CAISO's demand forecast

⁵⁷ *Id.* at 29.

⁵⁸ *Id.* at 31.

⁵⁹ *Id.* See CAISO Tariff, proposed section 29.11(c).

and approve EIM base schedules for their resources within one percent of CAISO's demand forecast will be exempt from these charges because such EIM Entities have taken steps to ensure the availability of sufficient resources to meet CAISO's demand forecast.⁶⁰

49. According to CAISO, it will collect two types of neutrality charges from EIM Market Participants to recover the difference between receipts from load and payments to supply for energy in the real-time market: (1) a real-time imbalance energy offset charge; and (2) a real-time congestion offset charge. As described by CAISO, the real-time imbalance energy offset has two components. The first is based on the sum of the net value of EIM transfers and the settlements of imbalance energy, less the real-time congestion offset. CAISO will adjust this initial calculation of the EIM Entity BAA charge to reflect flows between EIM Entity BAAs in order to align the allocation more closely with causation.⁶¹ CAISO then will assess the amounts allocated to EIM Entity BAAs to the applicable EIM Entity Scheduling Coordinator and will assess the amounts allocated to scheduling coordinators for load in the CAISO BAA. The second component distributes any residual neutrality amount among EIM Market Participants based on measured demand.⁶²

50. The real-time congestion offset charge is the application of the existing provision for a real-time congestion offset to the broader EIM. The proposed charge determines the contribution of each EIM Entity BAA to the congestion component of LMPs. Because virtual bids are applicable only in the CAISO BAA, the calculation includes an adjustment for the impact of virtual bids. Each EIM Entity BAA's share of the costs is assessed to its EIM Entity Scheduling Coordinator and the share allocated to the CAISO BAA is assessed as provided in section 11.5.4.2 of CAISO's tariff. The virtual bid adjustment is assessed to scheduling coordinators that submit virtual bids.⁶³

51. CAISO notes that EIM Participating Resources will be available for short start unit commitment and will receive the same real-time bid cost recovery as other real-time market resources. Energy included in an EIM base schedule will be treated the same as a self-schedule and will not be eligible for start-up or minimum load bid cost recovery. The net real-time market uplift charge for each BAA in the EIM is calculated according

⁶⁰ CAISO Transmittal Letter at 32.

⁶¹ *Id.* at 33 (citing CAISO Tariff, proposed section 11.5.4.1(c)).

⁶² *Id.* See CAISO Tariff, proposed section 11.5.4.1.

⁶³ CAISO Transmittal Letter at 33-34.

to the methodology in CAISO tariff section 11.8.6. This approach assesses the uplift to the load served by the resource that is paid the bid cost recovery. Bid cost recovery is tracked by resource, however, not by the location where the energy sinks. Therefore, CAISO has added an adjustment to account for EIM transfers. The net real-time market uplift charge will be assessed to the applicable EIM Entity Scheduling Coordinator.⁶⁴

52. CAISO will calculate payments for flexible ramping constraint capacity according to section 11, except that the real-time ancillary services market price for spinning reserve, a component of that calculation, will be deemed to be zero, because EIM Participating Resources cannot provide ancillary services in the real-time markets in their capacity as EIM Participating Resources. CAISO will charge the costs of these payments to the applicable EIM Entity Scheduling Coordinator based on the ratio of the EIM Entity BAA's requirement to its contribution to the applicable constraint constraint(s).⁶⁵

I. Transmission Charges and Administrative Fee

53. Because CAISO concluded that avoidance of pancaked rates for EIM transfers between BAAs participating in the EIM was critical to the creation of a real-time market that spans the service territories of multiple transmission providers, CAISO is proposing what it terms "reciprocity" whereby each EIM Market Participant will pay the transmission rate of the transmission provider in whose service territory it is located—i.e., a license plate rate. CAISO currently assesses the transmission charge to internal load and a wheeling access charge to exports. Under the EIM, internal load will continue to pay the access charge. To avoid rate pancaking and in recognition of load's payment of transmission charges in the receiving BAA, EIM transfers will be exempt from wheeling charges that might otherwise be imposed by the participating BAA from which the energy is exported.⁶⁶ CAISO has made a commitment to commence review of the transmission rate issue within the first year of operation and to propose a new rate if circumstances suggest a different approach would be preferable.⁶⁷

⁶⁴ *Id.* at 35.

⁶⁵ *Id.* (citing CAISO Tariff, proposed sections 11.25.4 and 29.11(g)).

⁶⁶ *Id.* at 36 (citing CAISO Tariff, proposed section 29.26).

⁶⁷ *Id.* at 38.

54. Currently, CAISO recovers the costs of operating its markets through the grid management charge.⁶⁸ The grid management charge comprises three components, each of which recovers the costs of a different category of services: (1) market services;⁶⁹ (2) system operations;⁷⁰ and (3) congestion revenue rights services. According to CAISO, it uses activity-based accounting to identify and capture costs based on significant activities, and then allocates the costs of those activities to the appropriate service category.⁷¹

55. CAISO is proposing that EIM Market Participants share in the cost of operating the real-time market. To develop the administrative charge, CAISO first analyzed the components of the grid management charge to determine the amounts attributable to the real-time market. According to CAISO, 63 percent of market services costs were attributable to the real-time market and 37 percent to the day-ahead market; and 48 percent of system operations costs were attributable to real-time dispatch and 52 percent to BAA services.⁷²

56. Next, CAISO explains that it used the 2012 rates and allocation from CAISO's 2010 cost of service study that supported the most recent grid management charge to derive a rate for operation of the real-time market. According to CAISO, the 2012 market services rate was \$0.09/MWh. Thus, the share attributable to real-time is \$0.06/MWh. The 2012 system operations rate was \$0.27/MWh, yielding a share of \$0.13/MWh attributable to real-time. By combining these amounts, CAISO calculated a real-time market charge of \$0.19/MWh. CAISO proposes to charge this amount as a fixed rate administrative fee to each EIM Market Participant based on the greater of:

⁶⁸ The grid management charge is a formula rate, and the current grid management charge is subject to a rate cap through fiscal year 2014. CAISO is required to file a tariff amendment to establish a new rate cap for subsequent years. *See* CAISO Tariff, section 11.22.

⁶⁹ The market services category encompasses all activities in scheduling both the day-ahead market and real-time market.

⁷⁰ The system operations category includes all activities in dispatching energy on the grid and BAA activities such as transmission planning.

⁷¹ CAISO Transmittal Letter at 39.

⁷² *Id.* CAISO states that it did not include congestion revenue rights in the analysis because EIM Market Participants are not included in the allocation of congestion revenue rights.

(1) the gross absolute value of that participant's imbalance energy for supply and load, or (2) five percent of the total gross absolute value of supply and five percent of the total gross absolute value of demand for all EIM Market Participants.⁷³ CAISO will use the revenues from the administrative fee to reduce the grid management charge within CAISO so as to remain revenue neutral. CAISO market participants pay a bid segment fee of \$0.005 per bid segment submitted to the market and a scheduling coordinator ID fee of \$1,000/month for each scheduling coordinator ID. CAISO proposes to assess the same charge to EIM Market Participants.⁷⁴

J. Greenhouse Gas Emissions Costs

57. CAISO recognizes that EIM resources outside California will incur GHG compliance costs when dispatched into California. In its proposal, CAISO would allow EIM resources outside California to submit a bid adder with their energy bids to cover the costs of complying with California Air Resources Board's (CARB) GHG regulations.⁷⁵ Under CAISO's proposal, resources that do not want to, or are legally barred from, complying with GHG regulations could use a high bid adder to signal the market that the resource does not want to be dispatched into the California market, and thus, avoid GHG compliance costs.⁷⁶

58. CAISO's proposal specifies that it will optimize dispatch across the EIM footprint accounting for the bid adder when resources are dispatched into California but excluding it for resources that are not dispatched into CAISO. CAISO explains that its current \$1,000/MWh energy bid cap will apply to the sum of a resource energy bid and GHG bid adder.⁷⁷ To address concerns about the potential abuse of the GHG bid adder, a resource would submit its GHG bid adder daily rather than hourly.

K. Market Monitoring and Mitigation

59. CAISO proposes that EIM Market Participants be subject to the rules of conduct in CAISO tariff section 37, except for section 37.2, which requires compliance with

⁷³ *Id.*; *id.*, Attachment D, Declaration of Michael K. Epstein at P 9.

⁷⁴ *Id.* at 39-40.

⁷⁵ *Id.* at 25 (citing CAISO Tariff, proposed section 29.32).

⁷⁶ *Id.* at 26.

⁷⁷ *Id.* at 25-27.

operating orders issued by CAISO. According to CAISO, the exclusion of this section is consistent with CAISO's lack of authority to issue dispatch instructions to EIM Market Participants except through the real-time market.

60. According to CAISO, CAISO's Department of Market Monitoring will provide market monitoring services for the participation of EIM Market Participants in the real-time market. The services will include monitoring the markets for actual or potential ineffective market rules, market abuses, market power, or violations of Commission or CAISO market rules; coordinating with CAISO business units that review and monitor the performance and quality of the CAISO markets; providing recommendations about potential market design flaws or ineffective market rules; and referring a matter to the Commission if there is sufficient credible evidence that a violation of Commission or CAISO market rules has occurred.⁷⁸

61. CAISO states that it also will apply real-time local market power mitigation to the participation of EIM Market Participants in the real-time market. According to CAISO, the procedures will be essentially the same as those applicable in current CAISO tariff section 39.7, but CAISO will apply them separately to bids which would have an effect on prices within a transmission-constrained submarket within each EIM Entity BAA. Similarly, the procedures for LMP decomposition will be the same as in section 31.2.1,⁷⁹ but CAISO will also apply them separately within each EIM Entity BAA. Furthermore, CAISO states that it may apply real-time local market power mitigation to bids which affect prices at transmission constraints limiting EIM transfers into an EIM Entity BAA if it determines that one or more entities have market power at the level of the EIM Entity BAA and if such action is authorized by the CAISO Board of Governors (Board). When real-time local market power mitigation procedures are applied, either due to projected congestion on a constraint within an EIM Entity BAA or on a transfer constraint into an EIM Entity BAA, CAISO will use the methods set forth in section 39.7 for determining default energy bids.⁸⁰

⁷⁸ *Id.* at 40.

⁷⁹ Under section 31.2.1 of CAISO's tariff, the congestion component of each LMP determined in the market power mitigation process is split (or "decomposed") into competitive and non-competitive congestion components to determine bid mitigation.

⁸⁰ CAISO Transmittal Letter at 40-41.

L. Miscellaneous Provisions

62. Under the proposed tariff, EIM Entity Scheduling Coordinators and EIM Participating Resource Scheduling Coordinators will be subject to the requirements of CAISO tariff sections 12 (creditworthiness), 13 (disputes), 14 (force majeure, indemnity, liabilities, and penalties), 20 (confidentiality), and 22 (miscellaneous provisions) with respect to their participation in the real-time market. According to CAISO, this requirement is designed to ensure that these administrative requirements are applied equally by CAISO to all market participants, including EIM Market Participants.⁸¹

63. Proposed section 29.22 also provides additional provisions that parallel those applicable to market participants for transactions within the CAISO BAA. Thus, if CAISO incurs any tax liability as a result of the participation of EIM Market Participants in the real-time market, CAISO will pass those taxes on to the EIM Entity Scheduling Coordinator for the area where the transactions triggered the tax liability. Furthermore, neither CAISO nor the EIM Entity will be a “Purchasing Selling Entity” for purposes of e-Tagging of EIM transfers. Finally, title for energy in the real-time market passes directly from the entity that holds title when the energy enters the CAISO controlled grid or the transmission system of an EIM transmission services provider, whichever is first following dispatch, to the entity that removes the energy from the CAISO controlled grid or the transmission system of an EIM transmission services provider, whichever last precedes delivery to load. According to CAISO, these provisions also ensure equivalent treatment of CAISO and EIM Entities with respect to participation of EIM Market Participants in the real-time market.⁸²

64. Proposed section 29.17 of CAISO’s tariff requires that the EIM Entity provide CAISO with EIM transmission service information regarding the network topology associated with its transmission capacity and that of EIM transmission service providers in its BAA that is available for use in the real-time market. The EIM Entity must update the information at least as frequently as the update schedule for CAISO’s full network model. The EIM Entity also must ensure that the information is accurate and that the capacity is made available, and must inform CAISO of any changes in availability. Further, the EIM Entity must establish a maximum EIM transfer limit at least 90 days before the first day in which it trades in the real-time market and provide CAISO with the

⁸¹ *Id.* at 21.

⁸² *Id.* at 22.

available EIM transfer limit prior to the start of each dispatch interval in accordance with the business practice manual for the EIM.⁸³

M. Effective Date and Request for Waivers

65. CAISO requests an effective date of September 23, 2014, for the proposed tariff changes to allow for a first trading date of October 1, 2014. According to CAISO, the effective date must be seven days before the first trading date because data submissions, such as demand forecasts, begin seven days before the related trading date. CAISO requests an effective date of July 1, 2014 for the EIM Service Agreements. CAISO asserts that this will allow it to begin market simulation on July 8, 2014. Finally, CAISO requests a Commission order on its filing by June 20, 2014. CAISO asserts that to conduct an effective simulation of the EIM, which is scheduled for July 8, 2014, CAISO and market participants must know the rules that will apply.⁸⁴

66. CAISO requests waiver of the Commission's notice requirement to permit the tariff changes contained in this filing to go into effect on September 23, 2014, for a first trading date of October 1, 2014. Specifically, pursuant to section 35.11 of the Commission's regulations, 18 C.F.R. § 35.11 (2013), CAISO requests waiver of the notice requirement contained in section 35.3 of the Commission's regulations to allow the requested effective date.⁸⁵

67. CAISO asserts that this filing substantially complies with the requirements of section 35.13 of the Commission's regulations, 18 C.F.R. § 35.13 (2013). CAISO also requests waiver of any such requirement to the extent this filing does not satisfy that requirement. Specifically, CAISO requests waiver of the requirement to submit Period 1 and Period 2 schedules, because the administrative fee is based on accepted components of the grid management charge included in the current CAISO tariff and is not based on historical data in Period 1 schedules or on the projections in Period 2 schedules. CAISO contends that there is good cause to waive filing requirements that are not material to the Commission's consideration of the filing, including the proposed administrative fee.⁸⁶

⁸³ *Id.* (citing CAISO Tariff, proposed section 29.17).

⁸⁴ *Id.* at 42.

⁸⁵ *Id.* at 43.

⁸⁶ *Id.*

III. Notice and Responsive Filings

68. Notice of CAISO's tariff filing was published in the *Federal Register*, 79 Fed. Reg. 13,291 (2014), with interventions and protests due on or before March 21, 2014. The Commission subsequently extended the comment period to March 31, 2014. The Public Utility District No. 2 of Grant County, Washington, the City of Los Angeles Department of Water and Power, J.P. Morgan Ventures Energy Corporation, Puget Sound Energy, Inc., M-S-R Public Power Agency, Goshen Phase II LLC, Avista Corporation, NRG Companies,⁸⁷ Cogeneration Association of California, Balancing Authority of Northern California, California Department of Water Resources State Water Project, Alliance for Retail Energy Markets, Golden State Water Company, Morgan Stanley Capital Group Inc., Salt River Project Agricultural Improvement and Power District, Xcel Energy Services Inc. (Xcel),⁸⁸ and Public Generating Pool filed timely motions to intervene.

69. The California Public Utilities Commission (CPUC) filed a notice of intervention and comments. The City of Seattle (Seattle), Western Area Power Administration (WAPA), Portland General Electric Company (Portland General), Southern California Edison Company (SoCal Edison), City of Redding, California (Redding), California Municipal Utilities Association (CMUA), Northern California Power Agency (NCPA), the City of Santa Clara, California (Santa Clara), Iberdrola Renewables LLC (Iberdrola), PacifiCorp, San Diego Gas & Electric Company (SDG&E), Pacific Gas and Electric Company (PG&E), Modesto Irrigation District (Modesto), Transmission Agency of Northern California (TANC), Western Power Trading Forum (WPTF), Electric Power Supply Association (EPSA), Utah Associated Municipal Power Systems (UAMPS),⁸⁹ Tri-State Generation and Transmission Association (Tri-State), Public Utility District No. 1 of Chelan County (Chelan PUD), and the Cities of Anaheim, Azusa, Banning, Colton, Pasadena and Riverside, California (Six Cities), filed timely motions to intervene and comments. The American Wind Energy Association, the California Wind Energy

⁸⁷ The NRG Companies are: NRG Power Marketing LLC, GenOn Energy Management, LLC, Cabrillo Power I LLC, Cabrillo Power II LLC, El Segundo Power LLC, NRG Delta LLC, NRG Marsh Landing LLC, NRG California South LP, High Plains Ranch II, LLC, Long Beach Generation LLC, NRG Solar Alpine LLC, NRG Solar Borrego I LLC, NRG Solar Blythe LLC, NRG Solar Roadrunner LLC, and Avenal Solar Holdings LLC.

⁸⁸ Xcel intervenes on behalf of Public Service Company of Colorado.

⁸⁹ UAMPS also filed a motion to consolidate Docket No. ER14-1386-000 with consideration of PacifiCorp's filing in Docket No. ER14-1578-000.

Association, the Center for Energy Efficiency and Renewable Technologies, and Renewable Northwest (collectively, Wind Parties) timely filed a joint motion to intervene and comments. Similarly, Nevada Power Company d/b/a NV Energy and Sierra Pacific Power Company d/b/a NV Energy (collectively, NV Energy) timely filed a joint motion to intervene and comments. The Natural Resources Defense Council and Public Utility Commissioners' EIM Working Group (PUC EIM Group) filed timely comments. California Energy Commission and CARB timely filed joint comments. United States Senator Harry Reid submitted comments on May 20, 2014 and Governor Edmund G. Brown, Jr. of California and Governor Brian Sandoval of Nevada submitted joint comments on June 2, 2014.

70. The Bonneville Power Administration (BPA) filed a timely motion to intervene, comment, and protest. Powerex Corporation (Powerex) filed a timely motion to intervene and protest. The Imperial Irrigation District, Los Angeles Department of Water and Power, and Sacramento Municipal Utility District (collectively, Neighboring Systems) timely filed motions to intervene, joint comments and a request for technical conference. On April 25, 2014, Redding, TANC, Santa Clara, and Modesto filed motions to intervene in Docket No. ER14-1578⁹⁰ and Docket No. ER14-1386-000 that included motions to consolidate the two proceedings. On May 14, 2014, CARB filed a motion to intervene out-of-time in this proceeding.

71. On April 15, 2014, motions for leave to answer and answers were filed by PG&E, PacifiCorp, Six Cities, and CAISO. On April 22, 2014, PacifiCorp filed a motion to file answer and answer to the answer filed by PG&E. On April 23, 2014, SoCal Edison filed a motion for leave to answer and answer to CAISO's answer. Powerex filed a motion for leave to answer and answer to CAISO and PacifiCorp's answers on April 30, 2014.

IV. Discussion

A. Procedural Matters

72. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2013), the notice of intervention and filing of timely, unopposed motions to intervene serve to make the movants parties to the proceeding. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2013), the Commission will grant CARB'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.

⁹⁰ PacifiCorp submitted its EIM implementation filing with the Commission in Docket No. ER14-1578-000.

73. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2013), prohibits an answer to a protest or an answer unless otherwise ordered by the decisional authority. We accept the answers to comments and protests filed by PG&E, PacifiCorp, Six Cities, and CAISO because they have provided information that assisted us in our decision-making process. We are not persuaded to accept the answers to answers filed by SoCal Edison and Powerex and will, therefore, reject them.

B. Substantive Matters

74. We conditionally accept CAISO's proposed tariff revisions for filing to be effective September 23, 2014, and CAISO's proposed EIM Service Agreements to be effective July 1, 2014, as requested, subject to further modifications, as directed in this order. CAISO's EIM proposal sets forth the rules and procedures by which CAISO will offer participation in the imbalance energy portion of its real-time market to other BAAs in the Western states. Under the proposed EIM tariff provisions, entities within BAAs outside of CAISO may voluntarily take part in the imbalance energy portion of the CAISO LMP-based real-time market alongside participants from within the CAISO BAA. CAISO states that its proposal does not represent a new market, but rather "takes advantage of its successful existing real-time market by adding new procedures to accommodate the voluntary participation of other balancing authorities without disrupting the current market structure."⁹¹

75. As CAISO submits, the proposed EIM will yield both quantitative and qualitative benefits. In particular, CAISO explains that the EIM Benefits Study projected economic benefits for customers of between \$21 and \$129 million per year, stemming primarily from the availability of a broader pool of resources to serve load and savings from replacing existing manual processes with CAISO's automated process.⁹² CAISO asserts that the EIM will also help integrate variable energy resources and increase reliability.

76. As an initial matter, we note that CAISO's EIM filing differs from regional transmission organization (RTO) or independent system operator (ISO) filings of a consolidated tariff for an overall footprint. The proposal encompasses—within one real-time balancing market—entities within an ISO market and entities outside an RTO/ISO market operating BAAs pursuant to OATTs. The structural differences between these areas require differences in treatment within the context of a single EIM, which raise the concerns of some participants in this proceeding. At the same time, parties to this

⁹¹ CAISO Transmittal Letter at 2.

⁹² *Id.* at 6.

proceeding generally agree that addressing imbalances in the West across a wider footprint can provide significant benefits.⁹³ The CPUC states in its comments that it “strongly supports the goals of the EIM.”⁹⁴ Senator Reid states that the EIM will help to more effectively integrate variable energy supplies and ensure greater reliability in the West, and urges the Commission to accept CAISO’s filing “so this important initiative can move forward to implementation this year.” Governor Brown and Governor Sandoval likewise express support for the EIM “as an important step to capture the benefits of regional coordination and build a clean energy future.” Parties generally concur that expansion of CAISO’s energy imbalance market beyond its BAA will provide customers with a range of benefits, including reduced costs, more efficient dispatch, improved integration of renewable resources, and enhanced reliability.⁹⁵

⁹³ *See, e.g.*, Powerex Protest at 2-3 (supporting CAISO’s general objectives for the EIM and commending CAISO’s staff as having the sophistication, tools, and commitment to support CAISO’s role as the operator of such a market); Iberdrola Comments at 2 (praising CAISO’s proposal as the “first credible initiative with promise to help the West take its first meaningful step toward a more efficient market structure,” with a design that is “well positioned to test a much needed, new energy market concept in the West”); EPSA Comments at 3 (characterizing the proposal as a “positive first step headed in the right direction,” and a “solid foundation” for the development of an energy imbalance market in the Western Interconnection); PG&E Comments at 3, 11; CARB Comments at 1-2; SoCal Edison Comments at 2-3; Portland General Comments at 2, 4, 12; PacifiCorp Comments at 4; NRDC Comments at 1; WAPA Comments at 1; WPTF Comments at 3, 10; Xcel Comments at 3; NV Energy Comments at 2; Seattle Comments at 3; Neighboring Systems Comments at 2. BPA, NCPA, and CMUA state that they do not oppose the filing, while Redding, TANC, and Santa Clara expressly take no position as to whether the proposal should be approved.

⁹⁴ CPUC Comments at 2.

⁹⁵ *See, e.g.*, SoCal Edison Comments at 2 (“The inclusion of additional resources, geographic diversity to integrate renewable resources, and load diversity will allow for a more efficient dispatch of resources to meet load, which will then reduce costs and, in turn, benefit [SoCal Edison’s] customers.”); Powerex Protest at 2; CPUC Comments at 2; PacifiCorp Comments at 4; Wind Parties Comments at 4-5; WPTF Comments at 3; Xcel Comments at 3; SDG&E Comments at 3; PUC EIM Group Comments at 2; NV Energy Comments at 2; Portland General Comments at 2.

77. While we conditionally accept the EIM proposal, below are the Commission's discussion and findings that primarily address aspects of CAISO's proposal that have been contested by various commenters. Our review of the aspects of CAISO's proposal that are not contested and not specifically discussed herein indicates that they are just and reasonable and are hereby accepted for filing, with the effective dates requested by CAISO.

1. General and Legal Issues

Background

78. CAISO asserts that the proposed EIM is the result of an extensive stakeholder effort and will provide benefits to new market participants with minimal risk.⁹⁶ CAISO explains that it held five full-day stakeholder meetings in an approximately six-month period, as well as five technical workshops, to discuss elements of particular interest to stakeholders in more detail.⁹⁷ CAISO states that stakeholders unanimously supported the goal of establishing the EIM, but held differing views as to some of the specific elements of the proposal.

Comments

79. Powerex asserts that CAISO has not met its burden of proof under section 205 of the Federal Power Act (FPA) to affirmatively demonstrate that its proposed tariff changes are just and reasonable.⁹⁸ Powerex requests that the Commission issue an order, consistent with the order rejecting Southwest Power Pool, Inc.'s (SPP) initial filing of its energy imbalance market in 2005, rejecting certain of the proposed tariff provisions and providing CAISO with guidance to address the deficiencies in its filing.⁹⁹ Similarly, Chelan PUD and Seattle request that the Commission provide guidance on proposed provisions that do not meet the Commission's policies, and require CAISO to work with its stakeholders to develop alternative approaches.¹⁰⁰

⁹⁶ CAISO Transmittal Letter at 2.

⁹⁷ *Id.* at 8.

⁹⁸ Powerex Protest at 7-9 (citing 16 U.S.C. § 824d(e)).

⁹⁹ *Id.* at 8-9 (citing *Southwest Power Pool, Inc.*, 112 FERC ¶ 61,303 (2005)).

¹⁰⁰ Chelan PUD Comments at 6; Seattle Comments at 7.

80. UAMPS requests that the Commission suspend CAISO's proposed tariff revisions for a nominal period, to become effective as requested by CAISO, and set the matter for hearing and settlement proceedings and investigation of the market power and governance issues raised in its comments.¹⁰¹ Neighboring Systems request that the Commission establish a technical conference to discuss and resolve operational seams issues raised by CAISO's filing.¹⁰²

81. Redding asks that the Commission consider whether the EIM proposal was developed pursuant to a sufficiently robust stakeholder process that afforded interested parties the opportunity to be heard.¹⁰³ Specifically, Redding notes that the CAISO Board approved the EIM design less than a year after the EIM was initially proposed, and that multiple stakeholders complained about the proceeding's "intentionally aggressive timeline." Several other commenters, however, commend CAISO for the transparent and extensive stakeholder process.¹⁰⁴

82. UAMPS and Tri-State each move to consolidate the proceedings in this docket with consideration of PacifiCorp's filing of proposed tariff revisions to reflect its participation in the EIM in Docket No. ER14-1578-000. UAMPS asserts that consolidating the proceedings will permit the two dockets to inform each other and the Commission's analysis, particularly with regard to market power mitigation issues.¹⁰⁵ Tri-State contends that a consolidated proceeding will allow the parties to examine how the CAISO and PacifiCorp markets will interact, and may help to expose gaps in the CAISO proposal.¹⁰⁶

¹⁰¹ UAMPS Comments at 6.

¹⁰² Neighboring Systems Comments at 21.

¹⁰³ Redding Comments at 11-13.

¹⁰⁴ See Wind Parties Comments at 4; PUC EIM Group Comments at 1-2; Iberdrola Comments at 1-2; SDG&E Comments at 5; PacifiCorp comments at 4.

¹⁰⁵ UAMPS Comments at 5-6.

¹⁰⁶ Tri-State Comments at 3-4.

Answers

83. CAISO and PacifiCorp each assert that consolidation is not necessary, as CAISO and PacifiCorp purposefully aligned the timing of their filings to permit concurrent review and the ability to identify and evaluate any gaps.¹⁰⁷

Commission Determination

84. Except as discussed below, and as explained more thoroughly in the body of this order, we find that CAISO has met its burden of proof to demonstrate that the proposed tariff revisions and EIM Service Agreements are just and reasonable pursuant to section 205 of the FPA. Consequently, there is no need to reject, suspend, or defer action on the CAISO's proposal. We also find it unnecessary to set the proposed tariff revisions and EIM Service Agreements for hearing. We find that the record in this proceeding is sufficient for the Commission to make determinations, and to direct compliance filings, where necessary, to modify the proposed tariff revisions and EIM Service Agreements. Further, we are satisfied that the stakeholder process, while expeditious, permitted stakeholders a meaningful opportunity to be heard. Accordingly, except with respect to the specific matters noted below, we find that CAISO's proposed tariff revisions and EIM Service Agreements are just, reasonable, and not unduly discriminatory, and will accept them.

85. We deny the requests to consolidate Docket No. ER14-1386-000 with Docket No. ER14-1578-000. The Commission's policy is to consolidate matters only if a trial-type evidentiary hearing is required to resolve common issues of law and fact and consolidation will ultimately result in greater administrative efficiency.¹⁰⁸ Because we are not setting either filing for hearing and settlement judge procedures, there is no need for consolidation.

86. We find good cause to grant waiver of the Commission's maximum 120-day notice requirement, 18 C.F.R. § 35.3(a)(1) (2013), to permit CAISO's requested September 23, 2014 effective date for its proposed tariff revisions. Granting waiver of the prior notice requirement will permit CAISO to proceed with its scheduled July 8,

¹⁰⁷ CAISO Answer at 94; PacifiCorp Answer at 4.

¹⁰⁸ See *Southern Cal. Edison Co.*, 129 FERC ¶ 61,304, at P 26 (2009), amended by 130 FERC ¶ 61,092 (2010); *Midcontinent Express Pipeline LLC*, 124 FERC ¶ 61,089, at P 27 (2008), order on reh'g, 127 FERC ¶ 61,164 (2009), order on remand, 134 FERC ¶ 61,155, reh'g denied, 136 FERC ¶ 61,222 (2011); *Startrans IO, L.L.C.*, 122 FERC ¶ 61,253, at P 25(2008).

2014 market simulation and to ensure that the necessary tariff provisions are in place prior to the anticipated October 1, 2014 start date for the EIM. Accordingly, we grant CAISO's request for the EIM Service Agreements to become effective on July 1, 2014, and for the proposed tariff revisions to become effective September 23, 2014.

87. Lastly, we grant CAISO's request for waiver of the applicable requirements of section 35.13 of the Commission's regulations, 18 C.F.R. § 35.13 (2013) to the extent not satisfied in CAISO's filing. In particular, we grant CAISO's request for waiver of the requirement to submit Period 1 and Period 2 cost of service information, because the administrative fee is based on accepted components of the grid management charge included in CAISO's tariff and is not based on historical data (Period 1) or projections (Period 2).

a. Business Practice Manuals

Background

88. CAISO states that it is in the process of developing a new business practice manual for the EIM that will supplement the EIM tariff provisions to address unique technical matters and serve as a single point of entry to CAISO's other business practice manuals. CAISO explains that the new business practice manual will be issued prior to its planned EIM market simulation.¹⁰⁹

Comments

89. Redding and Santa Clara assert that, without the EIM business practice manual, it is difficult to understand the complete scope of CAISO's proposed tariff revisions. Redding states that the yet-to-be-developed business practice manual will contain important information, such as: how CAISO will reflect EIM Market Participant schedules in the event WECC's Unscheduled Flow Mitigation Plan is initiated, how EIM Entity Scheduling Coordinators are to notify CAISO of enforceable limits on transmission capacity made available to the EIM, and the timeline for updating EIM transmission service information.¹¹⁰ Redding and Santa Clara request that approval of the

¹⁰⁹ CAISO plans to start its market simulation on July 8, 2014. CAISO Transmittal Letter at n.27.

¹¹⁰ Redding Comments at 13.

EIM be conditioned on the satisfactory resolution of the open business practice manual issues.¹¹¹

90. Powerex argues that CAISO's proposal inappropriately leaves issues having an impact on rates, terms, and conditions of jurisdictional service to the business practice manual. Powerex states that in order to meet FPA section 205 obligations, the Commission requires that the tariff, not manuals or handbooks, must define the rates, terms, and conditions of jurisdictional services.¹¹² Powerex identifies multiple places where CAISO's proposed tariff provisions indicate that certain procedures, calculations, etc. will be covered in the EIM business practice manual. In particular, Powerex contends that the following should be included in CAISO's tariff rather than a business practice manual: (1) how CAISO will determine whether an EIM Entity is exempt from under-and over-scheduling charges (section 29.11(d)(4)); (2) whether resources that are subject to interruption, or whose output is not controllable, are properly included within the validation for EIM base schedules being balanced with the demand forecast (section 29.34(e)(3)); (3) how CAISO will derive an initial EIM Base Load Schedule for each EIM Entity (section 29.34(g)(3)); (4) the manner for calculating the flexible ramping constraint requirement (section 29.34(m)(3)); (5) how CAISO will review the EIM Resource Plan to verify that it meets the flexible ramping constraint capacity requirement (section 29.34(m)(4) (A)); and (6) how CAISO will determine prices for congestion when an EIM Entity Scheduling Coordinator's approved EIM Resource Plan does not have sufficient bids to resolve congestion (section 29.34(o)). Powerex requests that the Commission direct CAISO to include these provisions in its tariff.¹¹³

Answer

91. In response to Powerex, CAISO states that it believes the detail included in proposed section 29 is consistent with the detail provided in the current CAISO tariff.¹¹⁴ CAISO maintains that the reference to the business practice manual in proposed section 29.11(11)(d)(4) does not pertain to the determination of exemption, which is already set

¹¹¹ *Id.* at 13; Santa Clara Comments at 8.

¹¹² Powerex Protest at 85 (citing *Energy Spectrum, Inc. v. N.Y. Indep. Sys. Operator, Inc.*, 141 FERC ¶ 61,197, at P 51 (2012); *Quest Energy, L.L.C. v. The Detroit Edison Co.*, 106 FERC ¶ 61,227, at PP 18, 20 (2004); *Atlantic City Electric Co. v. PJM Interconnection, L.L.C.*, 91 FERC ¶ 61,063, at 61,219–61,220 (2000)).

¹¹³ *Id.* at 86.

¹¹⁴ CAISO Answer at 88-90.

forth in sections 29.34(g) and 29.34(i). CAISO states instead that the reference in proposed section 29.11(d)(4) pertains to the determination of the demand forecast, the procedures for which are already described in a business practice manual. CAISO asserts that there is no basis to apply a different standard to the EIM.

92. CAISO states that section 29.34(e) does not contain a business practice manual reference and therefore it cannot determine what procedures Powerex is asserting must be in the tariff. CAISO further states that the determination of an initial EIM base load schedule under section 29.34(g) is a technical matter. CAISO asserts that the tariff identifies the inputs necessary for determining the EIM base load schedule and provides specific timelines by which those inputs must be provided. CAISO states that this is more than sufficient to satisfy the rule of reason. CAISO does not believe additional tariff revisions are necessary, but states that it would be willing to specify in the tariff the specific point in time that the final binding base load schedule is determined.

93. CAISO asserts the manner in which it will calculate the flexible ramping requirement and determine whether it is met under sections 29.34(m)(3) and 29.34(m)(4)(a) are also technical matters.¹¹⁵ CAISO contends its current tariff provides for a flexible ramping requirement for the CAISO markets. CAISO is extending these same requirements to EIM Entity BAAs and thus argues that there is no reason to require additional details in the CAISO tariff with respect to requirements that already exist with respect to operation of the real-time market.¹¹⁶

94. Lastly, CAISO asserts that the reference to the business practice manual in section 29.34(o) identifies where the transmission constraint relaxation parameters are established, not the manner of determining prices. CAISO states that there will be different transmission constraint relaxation parameters for different constraints and therefore it is not the type of detail that the rule of reason requires in a tariff.

¹¹⁵ *Id.* at 89.

¹¹⁶ *Id.*

Commission Determination

95. Decisions on whether to place an item in CAISO's tariff or the business practice manual are shaped by the Commission's "rule of reason" policy,¹¹⁷ which dictates that provisions that "significantly affect rates, terms, and conditions" must be included in the tariff.¹¹⁸ The Commission has found that it is appropriate for a business practice manual to contain "implementation details, such as instructions, guidelines, examples and charts, which guide internal operations and inform market participants of how the CAISO conducts its operations under the...tariff."¹¹⁹ The Commission has also found that the "rule of reason" test requires evaluation on a case-by-case analysis, comparing what is in the CAISO tariff against what is in the business practice manual.¹²⁰

96. Based on our preliminary analysis of the references to the EIM business practice manual in the proposed tariff provisions and CAISO's description in its pleadings of the information to be included therein, it appears that the proposed EIM tariff revisions contain the important factors through which CAISO will operate the EIM and that the implementation specifics can be classified as implementation details that may be placed in the business practice manual. As described in CAISO's proposal, the business practice manual appears to include implementation details, such as instructions, guidelines,

¹¹⁷ 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"); *Public Serv. Comm'n of N.Y. v. FERC*, 813 F.2d 448, 454 (D.C. Cir. 1987) (holding that the Commission properly excused utilities from filing policies or practices that dealt with only matters of "practical insignificance" to serving customers); *Midwest Indep. Transmission Sys. Operator, Inc.*, 98 FERC at 61,401, *clarification granted*, 100 FERC ¶ 61,262 (2002) ("It appears that the proposed Operating Protocols could significantly affect certain rates and services and as such are required to be filed pursuant to Section 205.").

¹¹⁸ *Cal. Indep. Sys. Operator Corp.*, 119 FERC ¶ 61,076, at P 656 (2007) (citing *ANP Funding I, LLC v. ISO New England Inc.*, 110 FERC ¶ 61,040, at P 22 (2005); *Prior Notice and Filing Requirements under Part II of the FPA*, 64 FERC ¶ 61,139, at 61,986-61,989 (1993), *order on reh'g*, 65 FERC ¶ 61,081 (1993)).

¹¹⁹ *Cal. Indep. Sys. Operator Corp.*, 122 FERC ¶ 61,271, at P 16 (2008).

¹²⁰ *Cal. Indep. Sys. Operator Corp.*, 116 FERC ¶ 61,274, at P 1370 (2006), *order on reh'g*, 119 FERC ¶ 61,076, *order on reh'g*, 120 FERC ¶ 61,271 (2007).

examples, and charts, which guide internal operations and not the significant provisions found in the tariff. Additionally, the detail included in proposed section 29 seems to be consistent with the detail provided in the current CAISO tariff with respect to CAISO's other markets. Accordingly, we will not require CAISO to describe these technical specifications in the CAISO tariff at this time. However, given that CAISO is still developing the EIM business practice manual, we find that our analysis under the "rule of reason" is only preliminary. We direct CAISO to continue working with stakeholders to develop the EIM business practice manual. Once this process is completed, we direct CAISO to file, within 30 days after the completion of the business practice manual stakeholder process, any necessary additions to its tariff identified during such process.

97. In light of the above, we disagree with Redding and Santa Clara that it is necessary for stakeholders to have the completed EIM business practice manual before accepting CAISO's EIM tariff revisions. In addition, we note that CAISO has stated that the EIM business practice manual will be issued prior to its planned market simulation.

b. Use of Information

Background

98. Proposed section 29.20 of CAISO's tariff provides that the confidentiality provisions in section 20 of the existing tariff will apply to the participation of EIM Market Participants in the real-time market.¹²¹

Comments

99. Powerex asserts that CAISO's existing confidentiality provisions were not developed with non-CAISO market participants in mind, and thus are not sufficient to protect EIM Market Participants obligated to submit information regarding transactions external to the CAISO markets from "harmful impacts."¹²² Powerex contends that CAISO should be required to implement safeguards to ensure that CAISO staff cannot utilize information obtained by EIM Market Participants "for any purpose other than the EIM."¹²³ Powerex further contends that, if CAISO intends to use information shared by EIM Entities for non-EIM purposes, CAISO should seek the agreement of external

¹²¹ CAISO Transmittal Letter at 21; CAISO Tariff, proposed section 29.20.

¹²² Powerex Protest at 84.

¹²³ *Id.*

transmission providers and BAAs, and that any agreement relating to sharing such information should be filed with the Commission.¹²⁴

Answer

100. In its answer, CAISO states that it is unclear what Powerex means by “non-EIM purposes.”¹²⁵ CAISO asserts that existing section 20 of its tariff has been approved by the Commission as just and reasonable and should adequately protect confidentiality in the EIM, while ensuring transparent operations and permitting CAISO to comply with its regulatory obligations.¹²⁶ However, CAISO states that, if Powerex identifies specific types of information that EIM Entities would provide that are not protected under the current confidentiality provisions, it will consider appropriate revisions to section 20.¹²⁷

Commission Determination

101. We accept CAISO’s proposal to apply the confidentiality provisions in section 20 of the current CAISO tariff to the EIM. We find that section 20 of CAISO’s tariff adequately protects the confidentiality of the information supplied to CAISO by EIM Market Participants. Furthermore, at this time, Powerex’s concerns are too vague to adequately address through any amendment or addition to the current provisions. In the future, should non-CAISO market participants believe that information submitted in connection with EIM participation is being misused, we expect CAISO and EIM Market Participants to work together to develop any necessary amendments.

102. Moreover, we note that existing section 20.4(b) obligates CAISO to notify a market participant if it is required to disclose a market participant’s confidential information by law, regulation, or in the course of an administrative or judicial proceeding, prior to disclosing the information.¹²⁸ The market participant may then defend against the disclosure requirement, and CAISO will work with the market participant to minimize any such disclosure and to obtain confidential treatment of the information by the individual seeking disclosure. Accordingly, CAISO’s existing

¹²⁴ *Id.* at 85.

¹²⁵ CAISO Answer at 8.

¹²⁶ *Id.*

¹²⁷ *Id.*

¹²⁸ CAISO Tariff, section 20.4(b).

confidentiality provisions provide a mechanism for EIM Market Participants to be notified of, and take actions to minimize, any disclosure of their confidential information.

2. **EIM Governance Structure and Market Monitor**

Background

103. CAISO proposes that its Department of Market Monitoring act as market monitor for the EIM, including making recommendations about potential market design flaws or ineffective market rules to CAISO and the Commission, and referring suspected violations to the Commission.¹²⁹

104. Additionally, for initial operation of the EIM, CAISO proposes to vest its Board with governance of the EIM.¹³⁰ Accordingly, CAISO does not propose any changes to its tariff with respect to governance at this time.¹³¹ CAISO explains that a transitional advisory committee (comprised of nine members nominated by stakeholders and appointed by the Board) (Transitional Committee) will advise the Board on matters related to EIM implementation and will develop a proposal for an independent EIM governance structure. CAISO expects that the Transitional Committee will develop a recommendation for establishing an independent EIM governance structure within 12 to 18 months, and that tariff changes reflecting that proposal should be filed with the Commission in time to potentially be implemented within two years.¹³²

Comments

105. The PUC EIM Group, the CPUC, and PacifiCorp support CAISO's proposal regarding the EIM's initial governance and the process to consider a future governance structure.¹³³

¹²⁹ CAISO Transmittal Letter at 40; CAISO Tariff, proposed section 29.38.

¹³⁰ CAISO Transmittal Letter at 4, 9, and Attachment H.

¹³¹ *Id.* at 4.

¹³² *See id.*, Attachment H, Memorandum from Karen Edson, CAISO Vice President Policy & Services, to CAISO Board of Governors (Dec. 11, 2013) at 1; *id.*, Attachment H, Energy Imbalance Market, Draft Final Governance Proposal (Nov. 7, 2013) at 8.

¹³³ PUC EIM Group Comments at 2 (supporting CAISO's development of short- and long-term governance structures, including use of the Transitional Committee);

(continued...)

106. Several commenters, however, assert that extending the authority of an RTO or state entity to a hybrid or multi-state market is unprecedented and does not comport with the Commission's independence criteria.¹³⁴ Powerex contends that the Commission has previously guarded against the actions of one state having undue impact on an RTO.¹³⁵ UAMPS and Powerex express concern with the fact that the Board will have the authority to authorize market power mitigation of market participants who have no representation within the CAISO governance structure—particularly, Powerex notes, as there is no mechanism for stakeholders to challenge the Department of Market Monitoring or the Board's market power mitigation decisions.¹³⁶ Powerex further asserts that the Department of Market Monitoring will have “very natural biases” toward approaches and conclusions best suited for CAISO's markets, which may not apply with equal force to

CPUC Comments at 2 (noting with approval that CAISO's proposed governance process “will ensure an independent EIM governance structure, and full representation by a broad range of experienced and geographically diverse leaders”); PacifiCorp Comments at 4 (expressing appreciation for CAISO's ongoing efforts to conduct a concurrent stakeholder process to design an independent governance structure).

¹³⁴ See Powerex Protest at 9 (noting that “the proposed structure represents the first time a single-state entity would be charged with market monitoring outside of its home state”); *id.* at 15-18 (asserting that the Board does not meet the Commission's independence criteria for a multi-state entity); Chelan PUD Comments at 4 (stating that use of a single-state Board and market monitor is “problematic and makes independence difficult”); UAMPS Comments at 5 (observing that UAMPS is “aware of no other market in the country that operates as a hybrid market both within and without an organized RTO or ISO market,” and asserting that CAISO has not supported its proposed governance structure); Seattle Comments at 6 (“As a party outside of the CAISO BAA and without representation on that body, participating in the EIM as proposed would entail accepting secondary status regarding governance and market design decision-making.”); *id.* (“Under the EIM, market participants outside of California would be subject to market monitoring and market mitigation by a non-independent entity.”); Redding Comments at 13 (arguing that it is too early in the stakeholder process to conclude whether that ongoing process “will result in adequate representation for all affected interests”).

¹³⁵ Powerex Protest at 10 (citing *PJM Interconnection L.L.C.*, 143 FERC ¶ 61,090, at P 58 (2013); *Midwest Indep. Transmission Sys. Operator*, 122 FERC ¶ 61,283, at PP 64-68 (2008)).

¹³⁶ See *id.* at 12-13; UAMPS Comments at 5.

Pacific Northwest markets characterized by unique seasonal upstream and downstream obligations, treaty requirements, fish and ice flow restrictions, and other operational and economic considerations.¹³⁷ Accordingly, Powerex requests that the Commission direct CAISO to: (1) issue a request for proposals to select a truly-independent market monitor prior to implementation; and (2) accelerate the development of an independent governance structure and provide reporting by the Transitional Committee to a Commission designee in the interim.¹³⁸ UAMPS requests that the Commission set all market power mitigation and governance issues for hearing and settlement judge procedures.¹³⁹

Answers

107. CAISO disagrees with these concerns, noting that the Commission has already found that the Department of Market Monitoring meets the independence requirements of Order No. 719.¹⁴⁰ In their answers, CAISO and PG&E both point out that the Department of Market Monitoring already has extensive experience with the existing energy imbalance market, and thus is in the best position to monitor the expanded EIM.¹⁴¹ CAISO and PG&E both further assert that Powerex has provided no evidence that the Department of Market Monitoring will lose its independence as a result of expanding the market beyond CAISO's BAA.¹⁴² CAISO notes that the Department of Market Monitoring does not have the authority to impose mitigation or penalties under CAISO's tariff.¹⁴³

108. CAISO likewise argues that the Commission already has found that its governance structure complies with the independence requirements of Order Nos. 888, 2000, and 719, and that the Commission has not established different independence requirements

¹³⁷ Powerex Protest at 14.

¹³⁸ *Id.* at 14, 18-19.

¹³⁹ UAMPS Comments at 6.

¹⁴⁰ CAISO Answer at 82-84 (citing *Cal. Indep. Sys. Operator Corp.*, 129 FERC ¶ 61,157 (2009), *order on compliance*, 134 FERC ¶ 61,050 (2011)).

¹⁴¹ *Id.* at 87-88; PG&E Answer at 5.

¹⁴² CAISO Answer at 83-84; PG&E Answer at 5.

¹⁴³ CAISO Answer at 86-87.

for multi-state ISOs.¹⁴⁴ CAISO states that, under the EIM, it remains the case that no Board member will be employed by, affiliated with, or have a financial interest in a market participant, and that Board meetings will continue to be public.¹⁴⁵ CAISO notes that the Commission did not require changes to CAISO's governance structure when Valley Electric Association, which is located in Nevada, joined CAISO, and similarly did not require changes to Midcontinent Independent System Operator, Inc.'s governance structure when Entergy joined, nor when it began providing Reliability Coordination Service to non-members.¹⁴⁶ Finally, CAISO reiterates that participation in the EIM is voluntary, and notes that participants can seek recourse with the Commission if CAISO acts in an unduly discriminatory manner in administering the EIM.¹⁴⁷

Commission Determination

109. We are not persuaded by commenters' concerns regarding CAISO's proposal that the Department of Market Monitoring act as market monitor for the EIM, and that its Board oversee governance of the EIM, assisted by the Transitional Committee. The Commission previously has found that the Department of Market Monitoring and the CAISO Board satisfy the Commission's independence requirements,¹⁴⁸ and stakeholders

¹⁴⁴ *Id.* at 76-82 (citing *Cal. Indep. Sys. Operator Corp.*, 112 FERC ¶ 61,010, at PP 18-36 (2005); *Cal. Indep. Sys. Operator Corp.*, 133 FERC ¶ 61,067, at PP 46-57 (2010)).

¹⁴⁵ *Id.* at 79.

¹⁴⁶ *Id.* at 81.

¹⁴⁷ *Id.* at 81-82.

¹⁴⁸ *See Cal. Indep. Sys. Operator Corp.*, 129 FERC ¶ 61,157 (2009), *order on compliance*, 134 FERC ¶ 61,050 (2011) (accepting CAISO's Order No. 719 compliance filing with language regarding independence and oversight of the Department of Market Monitoring); *Cal. Indep. Sys. Operator Corp.*, 112 FERC ¶ 61,010, at PP 18-36 (2005) (finding that CAISO's proposed Board selection process was "consistent with the principles of independence that the Commission has previously enumerated and acceptable for purposes of the Order Nos. 888 and 2000 independence requirements" and that the current Board was independent pursuant to Order No. 888); *Cal. Indep. Sys. Operator Corp.*, 133 FERC ¶ 61,067, at PP 46-57 (2010) (finding that CAISO's governance structure meets the requirements of Order No. 719: inclusiveness, fairness in balancing diverse interest, representation of minority position, ongoing responsiveness, and public posting of mission statement or organizational charter).

have not presented evidence or compelling arguments that expanding the EIM beyond CAISO will jeopardize this independence. Moreover, as CAISO correctly notes, the Commission did not require changes to CAISO's governance structure when Valley Electric Association, a Nevada cooperative, became a participating transmission owner in CAISO. We conclude that the same logic applies in the context of CAISO's EIM proposal. Accordingly, we find that CAISO's proposed governance structure is just and reasonable and we therefore accept it. Additionally, we agree that the Department of Market Monitoring is a logical choice to act as market monitor for the EIM, as it has extensive experience in monitoring an imbalance market in the West and with CAISO's software. We recognize that CAISO has committed to a process to consider governance in the future.¹⁴⁹ Finally, the EIM is a voluntary market and participants may seek recourse with the Commission if they believe CAISO or the Department of Market Monitoring is acting in an unduly discriminatory manner in administering the EIM.

3. Market Design and Operation

a. Resource Sufficiency

Background

110. Under CAISO's proposal, CAISO and each of the EIM Entities would retain their respective resource adequacy regimes to ensure the long-term availability of resources in each BAA.¹⁵⁰ In addition, CAISO states that the EIM includes a number of measures to ensure that each EIM Entity has sufficient resources to meet load reliably, including: (1) the requirement that EIM Entities' base schedules be balanced; (2) feasibility of EIM base schedules (i.e., deliverable within resources' operational capability and without unresolved congestion); and (3) flexible ramping capacity requirements. CAISO asserts this design will ensure that EIM participants will gain the benefits of increased resource diversity, while not allowing them to inappropriately "lean" on other BAAs (i.e., consume capacity at no charge as provided by the broader EIM footprint).

¹⁴⁹ We note that at its May 29, 2014 meeting the CAISO Board appointed nine members to its EIM Transitional Committee which will advise the CAISO Board on EIM-related matters and develop a recommendation over the next 18 months on a long-term EIM governance structure.

¹⁵⁰ CAISO Transmittal Letter at 3.

Comments

111. CMUA asserts that there is no symmetry between the forward market processes and resource sufficiency rules between the EIM Entity and the CAISO balancing authority, which can cause disruption or inequitable leaning on California resources.¹⁵¹ CMUA and NCPA contend that the Commission should require CAISO to examine this issue and report on options to align these key market elements as part of a comprehensive assessment of all costs and benefits resulting from the first year implementation of the EIM.¹⁵² CMUA further asserts that the EIM design does not include measures to isolate the effects of insufficient energy bids, nor does it have measures to ensure resources included in an EIM Entity's base schedules will perform as represented.

112. Powerex asserts that the proposed resource sufficiency test fails to ensure that sufficient committed resources will be available to serve load. Powerex further asserts that a resource sufficiency framework must be applied both in day-ahead and real-time (as is done in SPP's final approved energy imbalance market design), with material consequences for EIM Entities that fail either of these tests, and maintains that the CAISO proposed flexible ramping requirement will not prevent EIM participants from "leaning" on the capacity of neighboring systems.¹⁵³ Powerex argues that: (1) its proposal to apply charges for generation deviations is superior to CAISO's proposal; (2) CAISO's proposal does not include rules to ensure imports can be relied on to deliver energy in real time; and (3) the sufficiency test for external BAAs prior to real time should be based on capacity, not on forecasted energy. According to Powerex, because of these deficiencies, CAISO's proposal could result in serious reliability and efficiency consequences.¹⁵⁴ Powerex further complains that CAISO's EIM filing defers to a future business practice manual all details regarding how the flexible capacity requirement will be determined by CAISO and requests that the Commission require CAISO to provide additional detail on the methodology. Powerex also asserts that CAISO has not demonstrated how the deficiencies in CAISO's own resource adequacy framework will not result in CAISO "leaning" on the EIM Entities, and that the Commission should require CAISO to propose a robust day-ahead and real-time capacity based resource

¹⁵¹ CMUA Comments at 2, 8-10. Santa Clara and Redding expressly adopt the comments filed by CMUA in this proceeding, and NCPA states that it agrees with CMUA's comments in this proceeding.

¹⁵² *Id.* at 3; NCPA Comments at 3.

¹⁵³ Powerex Protest at 64-70.

¹⁵⁴ *Id.* at 57-64.

sufficiency test that would be applied to all EIM Entities, including both PacifiCorp and CAISO, prior to approving the EIM design.¹⁵⁵

113. Chelan PUD shares some of Powerex's concerns, including the concern that resource sufficiency standards should be based on capacity rather than forecasted energy.¹⁵⁶ Six Cities assert that load-serving entities within CAISO are subject to stringent resource adequacy requirements and both the loads and resources of CAISO load-serving entities have no option to limit, hedge, or control their exposure in the EIM.¹⁵⁷ Six Cities further assert that the EIM design includes no measures to ensure that resources included in an EIM Entity's base schedule will perform as represented. Six Cities urge the Commission to convene a technical conference to evaluate resource sufficiency issues further and develop measures to ensure that load-serving entities within the CAISO BAA are not forced to bear the cost of capacity resources needed to support the EIM or to disproportionately commit resources (i.e., the flexible ramping requirement) as a result of the EIM.

114. According to Portland General, EIM Entities with load-serving responsibilities have a strong obligation to maintain resource sufficiency, but other entities that do not serve as the provider of last resort for firm load service may push the limit of resource sufficiency rules.¹⁵⁸ Portland General cautions that allowing entities to lean on free capacity within the EIM could degrade the value of capacity resources within the region and that gains in short-term efficiencies under the EIM may come at the cost of long term reliability and viability for load-serving entities, especially those that are not inside the CAISO footprint.

115. SoCal Edison asserts that, in order to ensure equal treatment for resource participants, the EIM should not be permitted to develop its own allocation for flexible constraints costs, but concedes that resolution of this issue is not crucial for initial start-up of the EIM and can be deferred.¹⁵⁹

¹⁵⁵ *Id.* at 70-72.

¹⁵⁶ Chelan PUD Comments at 4-5.

¹⁵⁷ Six Cities Comments at 8-10.

¹⁵⁸ Portland General Comments at 9.

¹⁵⁹ SoCal Edison Comments at 17 and Appendix B.

116. Arguing to the contrary, Iberdrola asserts that the proposed EIM resource sufficiency framework is adequate.¹⁶⁰ Iberdrola states that the EIM is a real-time energy market and that suggestions for expanded resource sufficiency tests into the day-ahead timeframe are out of scope and inappropriate. Iberdrola suggests, however, that it may be appropriate to implement some level of scheduling accuracy requirements for variable energy resources, similar to the one CAISO is implementing for imported variable energy resources as part of its new Order No. 764 market implementation.¹⁶¹

117. CARB states that the proposed resource sufficiency testing and settlement structures have been discussed and vetted through multiple stakeholder meetings and that the EIM proposal improves the reliability and visibility of each balancing authority area's system, while facilitating the integration of valuable renewable resources over a larger geographic area.¹⁶² Similarly, the CPUC states that expanding and diversifying resources available to the EIM will aid in optimizing efficiencies, leading to cost savings and increased reliability, and that the upcoming tariff amendment filing on CAISO's full network model will be an important companion to the EIM design.¹⁶³

118. PG&E expresses concern that, under the EIM, CAISO does not take on the responsibility, either with respect to cost or accuracy, for the development of the base schedules.¹⁶⁴ PG&E thus recommends that proposed section 29.34 be amended to add a statement clarifying that the EIM Entity Scheduling Coordinator will remain solely responsible for approving and communicating the final hourly resource plan to CAISO.

Answers

119. In its answer, CAISO asserts the proposed resource sufficiency tests adequately ensure the sufficiency of energy to serve load and protect against leaning and that the concerns of Powerex, CMUA, and Six Cities are misplaced.¹⁶⁵ CAISO explains that it is

¹⁶⁰ Iberdrola Comments at 5.

¹⁶¹ *Id.* at 6 (citing proposed section 5.2.1 of CAISO's tariff revisions in Docket No. ER14-495-000).

¹⁶² CARB comments at 2.

¹⁶³ CPUC Comments at 2-3.

¹⁶⁴ PG&E Comments at 6-8.

¹⁶⁵ CAISO Answer at 34-41.

proposing an expansion of its real-time market, which does not incorporate a forward capacity requirement, and that it is not appropriate to impose such requirements on EIM participants. CAISO asserts that instead it is proposing robust scheduling and bidding requirements appropriate for a real-time market to ensure the availability and adequacy of energy, and that these tools are sufficient and should be tested prior to the imposition of additional requirements. In response to Powerex's contention that the proposed resource sufficiency framework will not prevent CAISO from leaning on EIM Entities, CAISO states that resource sufficiency is ensured through the CPUC's robust resource adequacy requirement (under which utilities must demonstrate sufficient capacity to service 115 percent of forecast load) and through CAISO's backstop to that program for noncompliance and for any failure of any non-CPUC jurisdictional load-serving entities to provide sufficient capacity.

120. CAISO states that it may consider implementing additional scheduling accuracy requirements for variable energy resources, as suggested by Iberdrola, in the future if actual operational experience suggests such measures are necessary.¹⁶⁶ Finally, with regard to Powerex's concerns on penalties for over- or under-scheduling of demand and not of generation, CAISO explains that such penalties are irrelevant for EIM Participating Resources which are dispatched by bid, not schedule, and that the requirement for balanced schedules will ensure that EIM Entities that overschedule generation will be subject to demand-based penalties.¹⁶⁷

121. Similarly, in its response, PacifiCorp asserts that intervenors' arguments regarding resource sufficiency and leaning as a result of the expansion of the CAISO real-time market to include the PacifiCorp EIM Entity are unproven.¹⁶⁸ PacifiCorp asserts that the resource planning process for PacifiCorp, overseen by state commissions, is analogous to the process utilized by CAISO, in which a planning reserve margin is set by the CPUC for entities subject to its jurisdiction and by the appropriate local regulatory authority for governmental entities, and that PacifiCorp's integrated resource planning process is comparable to that set forth in the CAISO tariff.¹⁶⁹ PacifiCorp disagrees with Six Cities'

¹⁶⁶ *Id.* at 40.

¹⁶⁷ *Id.* at 44.

¹⁶⁸ PacifiCorp Answer at 15-22.

¹⁶⁹ Under section 42 of CAISO's tariff, CAISO prepares an annual forecast of weekly generation capacity compared to weekly peak demand, and develops market mechanisms to bring peak periods into compliance with reliability criteria if the forecast identifies any issues.

contention that an EIM Entity may not provide sufficient capacity resources to meet its imbalance energy needs, and with Chelan PUD's assertion that some EIM participants will opt out of capacity commitment processes in their source balancing authority. PacifiCorp maintains that the EIM is not intended to supersede or diminish the existing mechanisms and responsibilities present in either the CAISO or PacifiCorp BAAs to ensure resource adequacy and sufficiency.

Commission Determination

122. We accept CAISO's proposal regarding EIM resource sufficiency and its proposed measures for the prevention of leaning, and direct CAISO to include further details of its proposal in the EIM business practice manual, as discussed below. Overall, we find CAISO's proposal to be reasonable, as it allows EIM participants to gain the benefits of increased resource diversity, while preventing them from inappropriately leaning on other BAAs. We find that the proposed sufficiency test is adequate to ensure that sufficient committed resources will be available to serve load. We find that each BAA's native resource adequacy programs and obligations to comply with NERC reliability standards will provide an adequate resource sufficiency framework for the EIM.

123. We decline to require CAISO to make the changes to its proposal requested by intervenors and will not convene a technical conference to address these issues. In particular, we are not persuaded that forward capacity obligations should be required for EIM Entities. The proposal before us is an expansion of CAISO's real-time market only. That market does not incorporate a forward capacity requirement. With regard to the concerns of Powerex and Chelan PUD that some EIM participants may opt out of the capacity commitment process in their source balancing authority in order to consume capacity at no charge as provided by the broader EIM footprint, we note that each EIM Entity's resource adequacy rules and obligations will continue after the EIM is operational. Additionally, we do not share Powerex's concern that the proposed resource sufficiency framework fails to prevent CAISO from "leaning" on EIM Entities because CAISO does not apply the same resource sufficiency requirements on EIM Entities that it imposes on resources within its own BAA. Load-serving entities in CAISO are subject to the resource adequacy requirements of the CPUC or other local regulatory authorities and in CAISO's tariff; collectively, these resource adequacy rules protect against insufficiency.

124. We agree with PG&E's assertion that, under the EIM, the EIM Entity Scheduling Coordinator is responsible for the accuracy of the resource plan and the base schedules it submits to CAISO. However, for purposes of transparency, CAISO should include in its EIM business practice manual a description of its proposed sufficiency tests and the validation processes it proposes to perform in day-ahead and real-time. Such description

should include a detailed explanation of the power flow analysis CAISO proposes to run in parallel with its day-ahead market to put EIM Market Participants on an equal footing with day-ahead market participants.¹⁷⁰ In addition, the description should clearly indicate the responsibilities for CAISO, EIM Entities, the reliability coordinator (Peak Reliability), and any other entities involved in these processes.

b. Transmission Usage Charge

Background

125. Under its current tariff, CAISO assesses a transmission access charge to internal load (to pay for transmission of energy consumed in CAISO) and a wheeling access charge to exports (to pay for transmission of energy sent through and consumed outside CAISO).¹⁷¹ CAISO is not proposing to change the application of these charges for non-EIM participants. Rather, CAISO proposes to implement reciprocal transmission rates for EIM transfers.¹⁷² Under the proposal, CAISO load will continue to pay the transmission access charge, which may include EIM transfers from other EIM Entity BAAs, but would not be assessed charges on transmission used for such EIM transfers in the other EIM Entity BAAs. Similarly, CAISO proposes that EIM transfers will be exempt from the CAISO wheeling access charge assessed on other CAISO exports.¹⁷³ CAISO commits to commence review of its proposed transmission rate structure within the first year of operation and may propose a new rate if appropriate.¹⁷⁴

126. CAISO states that the Commission previously has found both CAISO and PacifiCorp's transmission rates to be just and reasonable and not unduly discriminatory, and that therefore the approach proposed in its filing is also just and reasonable.¹⁷⁵

¹⁷⁰ See CAISO Transmittal Letter at 23.

¹⁷¹ *Id.* at 36. The CAISO high voltage wheeling access charge is currently \$8.36/MWh.

¹⁷² *Id.* EIM transfers are transfers of energy in real-time between an EIM Entity BAA and the CAISO BAA, or between EIM Entity BAAs, using transmission capacity made available to the real-time market through the EIM. See CAISO Tariff, Appendix A (Master Definition Supplement).

¹⁷³ CAISO Transmittal Letter at 36.

¹⁷⁴ *Id.* at 38.

¹⁷⁵ *Id.* at 36.

CAISO argues that the elimination of pancaked transmission rates between EIM Entity BAAs is consistent with the FPA.¹⁷⁶ CAISO notes that its proposal is similar to the removal of pancaked transmission rates within ISOs and RTOs, which the Commission has consistently approved.¹⁷⁷ CAISO asserts that the Commission has also directed the removal of pancaked transmission rates within and between ISOs and RTOs.¹⁷⁸

127. Further, CAISO argues that EIM transfers represent a new form of transmission service under its tariff that is different from transmission service for forward transactions, and thus its proposed treatment of EIM transfers does not represent selective transmission service discounting. CAISO also argues that all customers purchasing energy in the EIM will enjoy the benefits of the EIM transmission rates and any BAA in the Western Interconnection is eligible to join the EIM, so its reciprocal transmission rate proposal is not unduly discriminatory. CAISO further contends that stakeholder concerns about how its proposal may affect market behavior or the distribution of revenues are premature and ignore the benefits that market participants receive through forward or other real-time transactions. CAISO also asserts that the greater efficiency of the EIM outweighs any lost transmission revenues that CAISO and PacifiCorp may incur as a result of reciprocal transmission rates.¹⁷⁹

128. Finally, CAISO disagrees with stakeholder concerns that its proposal is not truly “reciprocal” because PacifiCorp’s EIM proposal in Docket No. ER14-1578-000 requires EIM Participating Resources to take transmission under PacifiCorp’s OATT. CAISO argues that if an EIM resource takes long-term firm transmission service under PacifiCorp’s OATT, the cost of such service will be a fixed cost to the resource and will not be included in the marginal cost bid of the resource. Alternatively, if the resource takes short-term transmission service under PacifiCorp’s OATT, CAISO argues that its

¹⁷⁶ *Id.*

¹⁷⁷ *Id.* at 36 (citing *Regional Transmission Organizations*, Order No. 2000, FERC Stats. & Regs. ¶ 31,089 (1999) (Order No. 2000), *order on reh’g*, Order No. 2000-A, FERC Stats. & Regs. ¶ 31,092 (2000), *aff’d sub nom. Pub. Util. Dist. No. 1 v. FERC*, 272 F.3d 607 (D.C. Cir. 2001)).

¹⁷⁸ *Id.* at 36 (citing *Midwest Indep. Transmission Sys. Operator, Inc.*, 104 FERC ¶ 61,105, at P 35, *order on reh’g*, 105 FERC ¶ 61,212 (2003); *ISO New England Inc. v. New England Power Pool*, 106 FERC ¶ 61,280, at P 95 (2004); and *ISO New England Inc. v. New England Power Pool*, 109 FERC ¶ 61,147 (2004)).

¹⁷⁹ *Id.* at 37.

treatment of the cost in its energy bid will be consistent with the *pro forma* OATT, which requires additional payments for transmission associated with off-system sales.¹⁸⁰

Comments

129. The PUC EIM Group and PacifiCorp support CAISO's proposal to examine transmission usage charges with stakeholders in the first year of EIM operation.¹⁸¹ The PUC EIM Group asserts that this approach is appropriate because it is not yet clear how much energy will be transacted through the EIM and how to charge for the transmission associated with EIM energy and states that establishing a charge for EIM transactions between BAAs now, other than the reciprocal approach proposed by CAISO, would inhibit liquid operation of the EIM.¹⁸² SDG&E supports CAISO's proposal because it believes that not having an incremental transmission charge is important for the efficient operation of a centralized real-time market. Further, SDG&E asserts that the transmission costs used to transfer energy between BAAs already have been incurred and should have no effect on the dispatch of resources to meet energy imbalance needs.¹⁸³

130. Other commenters, however, believe that CAISO's proposal should be rejected because it is unjust and unreasonable, unduly discriminatory, constitutes unduly preferential transmission rates for EIM transactions, and because CAISO has not supported its claim that its proposal is just and reasonable.¹⁸⁴ Commenters note that otherwise identical transactions in the same market would be charged differently for transmission, depending on whether the transaction is EIM or non-EIM, which will give a price advantage to resources participating in the EIM.¹⁸⁵ Powerex argues that an export from CAISO uses the same transmission facilities (and incurs the same cost of service)

¹⁸⁰ *Id.* at 38 (citing Order No. 888, FERC Stats. & Regs. ¶ 31,036 at 31,751).

¹⁸¹ PUC EIM Group Comments at 2; PacifiCorp Comments at 7-8.

¹⁸² PUC EIM Group Comments at 2.

¹⁸³ SDG&E Comments at 4.

¹⁸⁴ Powerex Protest at 19-21, 27-39; BPA Comment and Protest at 5-7; TANC Comments at 19-21; Seattle Comments at 5; Portland General Comments at 7; Neighboring Systems Comments at 13-15; WAPA Comments at 4-5; CMUA Comments at 5; Redding Comments at 7-9.

¹⁸⁵ Powerex Protest at 22-24, 26; BPA Comment and Protest at 5-6; Portland General Comments at 7.

regardless of whether it is arranged day-ahead, through an export in the real-time market, or through the EIM; therefore, Powerex contends that the wheeling access charge should apply to all three transactions.¹⁸⁶ WAPA argues that similarly situated entities should pay the same price for the same service.¹⁸⁷ Commenters assert that the difference in wheeling access charges between EIM and non-EIM market participants could cause EIM participants to shift their transactions into the EIM and could cause distortions to Western wholesale energy and transmission markets.¹⁸⁸

131. WPTF is concerned that the CAISO proposal includes preferential treatment for EIM resources that wheel through CAISO and sink in another EIM Entity's BAA (e.g., if an EIM Participating Resource in one of the PacifiCorp BAAs wheels through CAISO to another EIM Entity, it pays no CAISO wheeling access charge, but if a CAISO generator wheels outside of CAISO, it pays the CAISO wheeling access charge). WPTF believes it is reasonable for load in each EIM Entity BAA to pay transmission for EIM energy when that energy sinks there, but asserts that a distortion is created when an EIM Participating Resource sells through CAISO and is not required to pay the same wheeling access charge that a CAISO resource would have to pay.¹⁸⁹

132. Powerex states that it supports removal of rate pancaking in the appropriate context, but that CAISO's proposal effectively sets up a "free transmission zone" between CAISO and the EIM Entity BAAs that applies exclusively to EIM transactions.¹⁹⁰ Powerex asserts that more appropriate methods of eliminating rate pancaking, such as a single OATT transmission rate, should be implemented across all market timeframes and should result from a thorough and inclusive stakeholder

¹⁸⁶ Powerex Protest at 25-26. Powerex also provides an example of such transactions in its protest and in the attached statement of William W. Hogan. *Id.* at 23-24; *id.*, Attachment B at 10.

¹⁸⁷ WAPA Comments at 4-5. WAPA notes that it supports BPA's comments regarding CAISO's reciprocal transmission proposal.

¹⁸⁸ Powerex Protest at 21, 29-30; *id.*, Attachment B at 10; Redding Comments at 8-9; TANC Comments at 20; BPA Comment and Protest at 6; CMUA Comments at 5-6; Neighboring Systems Comments at 13, 15; Seattle Comments at 5.

¹⁸⁹ WPTF Comments at 3-4.

¹⁹⁰ Powerex Protest at 37-38.

process.¹⁹¹ Powerex would support an approach that would eliminate wheeling access charges for all exports in all market timeframes.¹⁹²

133. Powerex claims that CAISO's assertion that the proposal is not discriminatory because all customers purchasing EIM energy enjoy the benefit of the non-pancaked transmission rate ignores the fact that resources can only participate in the EIM if the BAA in which they are located elects to participate in the EIM, and that requiring transactions through a specific market to avoid being charged a discriminatory rate does not eliminate the underlying discrimination.¹⁹³ Neighboring Systems similarly argue that CAISO's claim in this regard does not address the concern that preferential transmission rate treatment, rather than the merits of the EIM, will cause some parties to join the EIM.¹⁹⁴ BPA asserts that the fact that the Commission has previously found CAISO and PacifiCorp's transmission rates to be just and reasonable does not support CAISO's proposal to selectively exempt certain transmission system users from these approved rates.¹⁹⁵ CMUA asserts that the avoidance of rate pancaking does not determine whether a rate is just and reasonable.¹⁹⁶ Similarly, Redding argues that avoiding pancaked rates does not justify CAISO's dismissal of unresolved concerns about the effect of its transmission proposal on non-EIM participants.¹⁹⁷

134. Commenters note that prior Commission orders approving or requiring removal of pancaked transmission rates were applied to all market participants, not a subgroup of market participants.¹⁹⁸ Powerex argues that the cases cited by CAISO in support of its

¹⁹¹ *Id.* at 38.

¹⁹² *Id.*

¹⁹³ *Id.* at 28.

¹⁹⁴ Neighboring Systems Comments at 15.

¹⁹⁵ BPA Comment and Protest at 6.

¹⁹⁶ CMUA Comments at 5.

¹⁹⁷ Redding Comments at 9.

¹⁹⁸ Powerex Protest at 35 (citing *Pennsylvania-New Jersey-Maryland Interconnection*, 81 FERC ¶ 61,257 (1997), *order on reh'g*, 92 FERC ¶ 61,282 (2000), *vacated on other grounds sub nom Atlantic City Elec. Co. v. FERC*, 295 F.3d 1 (D.C. Cir. 2002); *Midwest Indep. Transmission Sys. Operator, Inc.*, 84 FERC ¶ 61,231 (1998), *order on reh'g*, 85 FERC ¶ 61,372 (1998)); BPA Comment and Protest at 7.

proposed elimination of pancaked transmission rates do not demonstrate that its proposal is just and reasonable.¹⁹⁹ It notes that the Commission concluded that rate pancaking between RTOs is allowed, while within an RTO, rate pancaking is prohibited under Order No. 2000.²⁰⁰ Powerex asserts that CAISO's proposal diverges from this precedent because CAISO proposes to eliminate only the wheeling access charge for certain transactions within a single market.²⁰¹ Similarly, Neighboring Systems highlight a concern of Imperial Irrigation District that CAISO's proposal is not consistent with Commission precedent on rate pancaking because the EIM will not be an RTO (e.g., EIM participants' transmission facilities will not be under CAISO's control) and the proposed reciprocal transmission rates are not available to all transmission customers in the region.²⁰² Powerex also argues that CAISO's reference to *ISO New England Inc., v. New England Power Pool* does not support CAISO's proposal because the seams elimination in that case involved all transaction timeframes and did not eliminate rate pancaking for one market while preserving it in all others.²⁰³

135. Powerex argues that the CAISO proposal amounts to a discount that is contrary to Commission policy, which requires discounts to be offered to all eligible customers for the same time period on all unconstrained paths that go to the same point of delivery.²⁰⁴

136. Neighboring Systems argue that CAISO's proposal is inconsistent with the Commission's cost causation principles.²⁰⁵ Similarly, CMUA asks whether CAISO's proposal is inconsistent with cost causation principles because it allows EIM Entities to inequitably "lean" on CAISO transmission investments.²⁰⁶

¹⁹⁹ Powerex Protest at 36.

²⁰⁰ *Id.* (citing *Midwest Indep. Transmission Sys. Operator, Inc.*, 104 FERC ¶ 61,105, at P 35, *order on reh'g*, 105 FERC ¶ 61,212 (2003)).

²⁰¹ *Id.* at 37.

²⁰² Neighboring Systems Comments at 12 n.30.

²⁰³ Powerex Protest at 37 (citing *ISO New England Inc.*, 106 FERC ¶ 61,280 (2004)).

²⁰⁴ *Id.* at 33.

²⁰⁵ Neighboring Systems Comments at 14.

²⁰⁶ CMUA Comments at 5.

137. Powerex asserts that CAISO's proposal is inconsistent with the Commission's SPP energy imbalance market determinations, in which the Commission supported SPP's proposal that market participants who have not previously paid for transmission service pay for transmission to support energy imbalance service transactions.²⁰⁷

138. Powerex asserts that CAISO selectively compares transmission service for forward transactions and EIM transactions, ignoring the fact that non-EIM real-time transactions are also treated differently. Further, Powerex argues that the Commission approves differences in transmission rates based on priority and duration of service, not differences in market design.²⁰⁸

139. Commenters contend that transmission revenue will decrease due to CAISO's reciprocity proposal, that this revenue loss will increase in significance as more BAAs join the EIM, and that transmission revenue lost due to EIM transfers will be shifted to other transmission customers.²⁰⁹ With regard to CAISO's assertion that greater EIM efficiency will outweigh lost transmission revenues, Powerex contends that a cost-benefit analysis is not the appropriate test for whether the transmission rate proposal is just and reasonable.²¹⁰ Neighboring Systems also argue that the benefits of the EIM do not justify the transmission subsidy paid by non-EIM participants under CAISO's proposal because EIM benefits will go exclusively to EIM participants.²¹¹

140. Further, Neighboring Systems note that one of CAISO's main justifications for not assessing the wheeling access charge on EIM transfers during the first year of EIM operation is that transfer capability would be limited.²¹² Neighboring Systems contend that even if the transmission revenue shortfall is limited, that does not make CAISO's proposal lawful.²¹³ Neighboring Systems are concerned that CAISO's proposed tariff

²⁰⁷ Powerex Protest at 31-32 (citing *Southwest Power Pool, Inc.*, 114 FERC ¶ 61,289, at PP 98-104 (2006)).

²⁰⁸ *Id.* at 28.

²⁰⁹ *Id.* at 29-31; BPA Comment and Protest at 6; WAPA Comments at 5; Neighboring Systems Comments at 13-16.

²¹⁰ Powerex Protest at 29.

²¹¹ Neighboring Systems Comments at 14.

²¹² *Id.* at 15-16.

²¹³ *Id.* at 16 (citing *FPC v. Texaco Inc.*, 417 U.S. 380, 399, (1974)).

amendments do not place any limits (in amount or duration) on the proposal, which means that CAISO transmission customers may be subsidizing EIM transactions indefinitely.²¹⁴ Neighboring Systems state that EIM transfer capability could grow to 800 MW with only PacifiCorp's participation, and an additional 1,500 MW if NV Energy joins the EIM, so transmission revenue shortfalls could be significant and should not be allowed to go on indefinitely.²¹⁵

141. SoCal Edison asserts that each EIM Entity will separately interpret "reciprocity." It believes that because EIM resources in PacifiCorp's BAAs are required to purchase transmission, these resources' EIM energy bids will likely include costs associated with this transmission that CAISO load will pay, while PacifiCorp load will not pay for transmission on CAISO's system when it receives EIM energy from CAISO. SoCal Edison argues that this unequal treatment of transmission costs should not continue long term and that the Commission should require CAISO to submit a compliance filing within one year that includes a more balanced transmission rate recovery between CAISO and EIM Entities.²¹⁶ Similarly, WPTF notes that EIM resources in the PacifiCorp BAAs must pay transmission in order to participate in the EIM, and if that energy serves CAISO load, the load will also pay CAISO's transmission access charge. Therefore, WPTF argues that CAISO's proposal does not avoid rate pancaking and that rate pancaking is unavoidable because there are not uniform transmission rates throughout the EIM. WPTF asserts that, since avoidance of rate pancaking is not possible, there is insufficient rationale to give EIM resources wheeling through CAISO a competitive advantage over CAISO exports by not charging EIM resources the wheeling access charge.²¹⁷

142. CMUA states that CAISO's commitment to a stakeholder process examining its transmission rate proposal is a helpful start to addressing stakeholder concerns and states that the process must include a full examination of options addressing market effects and equitability issues both within and outside the EIM.²¹⁸ Powerex argues that CAISO's proposal to reevaluate its transmission rate proposal in a stakeholder process during the first year of EIM operation does not mitigate concerns with the proposal.²¹⁹ Redding

²¹⁴ *Id.*

²¹⁵ *Id.* at 16-17.

²¹⁶ SoCal Edison Comments at 2.

²¹⁷ WPTF Comments at 4-5.

²¹⁸ CMUA Comments at 6.

²¹⁹ Powerex Protest at 32.

contends that the first year of operation may not be indicative of problems in later years of operation because additional entities and transfer capacity may be added to the EIM.²²⁰ Similarly, TANC is concerned that any negative effects of CAISO's proposal on non-EIM transmission facilities may increase as EIM transfer capability increases and requests that the Commission ensure that non-EIM transmission facilities will not be negatively affected by CAISO's proposal.²²¹ Further, Redding argues that after-the-fact monitoring will not protect non-EIM participants from potential market distortions associated with CAISO's proposal.²²²

143. Powerex suggests that CAISO should apply its existing wheeling access charge to EIM transactions and immediately engage in a stakeholder process to address transmission rate pancaking.²²³ Similarly, BPA requests that the Commission reject CAISO's proposal or, in the alternative, expand it to include all exports.²²⁴ WPTF also requests that the Commission direct CAISO to apply the wheeling access charge to EIM exports from CAISO or, in the alternative, to file a revised EIM wheeling proposal within one year of commencing EIM transactions and implement the revised proposal no later than spring of 2016.²²⁵ BPA requests that if the Commission approves the CAISO proposal, such approval should be conditional and subject to refund, with a requirement for CAISO to file a report with the Commission after a year of EIM operation to determine whether market participants were adversely affected by the proposal.²²⁶ Neighboring Systems propose that the Commission require CAISO to submit a non-subsidized transmission rate proposal for EIM transactions with an October 1, 2015 effective date. They request that if the Commission allows CAISO's reciprocity proposal to go into effect, then an "at-risk" condition should be placed on the shareholders of PacifiCorp and the CAISO public utility transmission owners that choose to participate in the EIM to ensure that they bear any transmission revenue shortfalls resulting from EIM

²²⁰ Redding Comments at 8-9.

²²¹ TANC Comments at 20-21; Santa Clara Comments at 6-7 (expressing similar concerns and stating that it adopts TANC's and CMUA's comments as its own).

²²² Redding Comments at 8-9.

²²³ Powerex Protest at 32.

²²⁴ BPA Comment and Protest at 7.

²²⁵ WPTF Comments at 6.

²²⁶ BPA Comment and Protest at 7.

transactions.²²⁷ Imperial Irrigation District requests (through Neighboring Systems' comments) that when it becomes a CAISO participating transmission owner, it will not be required to bear any revenue shortfall resulting from CAISO's reciprocal EIM transmission rates.²²⁸

Answers

144. CAISO responds that commenters' concerns that EIM transmission charges may be unduly discriminatory are unfounded.²²⁹ CAISO claims that the provision removes pancaked rates for those participating in the EIM. CAISO explains that transactions within its market are similarly not charged pancaked rates and that it is reasonable to apply the same policy to participants in the EIM. CAISO points to a Commission order where the Commission accepted a proposal to remove pancaked rates between RTO regions stating that the proposed removal of pancaked rates "serves as an incentive to transmission owners that are not currently members of Alliance or Midwest ISO to join one of those organizations."²³⁰ In response to WPTF, CAISO clarifies that EIM transfers that are exempt from the wheeling access charge would not be allowed to export out of the EIM footprint, as those transactions would not be considered EIM transfers.²³¹

145. CAISO further argues that the Commission has approved the removal of pancaked rates in both intra-RTO and inter-RTO cases.²³² Additionally, CAISO acknowledges that the proposed EIM would be the first imbalance energy market to extend beyond the borders of an existing RTO, but asserts that would not render the removal of pancaked rates in the EIM unjust, unreasonable, or unduly discriminatory or preferential. CAISO states that the EIM provides a qualitatively different service than the day-ahead and 15-minute markets and therefore it is acceptable to differentiate the charges applied to customers of the different markets.

²²⁷ Neighboring Systems Comments at 17.

²²⁸ *Id.* at 20-21.

²²⁹ CAISO Answer at 50.

²³⁰ *Id.* at 51 (citing *Ill. Power Co.*, 95 FERC ¶ 61,183, at 61,644 (2001)).

²³¹ *Id.* at 53.

²³² *Id.* at 54.

146. CAISO explains that the removal of pancaked rates in the EIM is not a discounted transmission charge that would be prohibited by Order No. 890-A.²³³ CAISO explains that the prohibition of discounted rates applies only when that discount is not offered to all customers of a given transmission service. However, CAISO argues that the EIM represents a different service when compared to the day-ahead and 15-minute markets and therefore should not be characterized as a discounted transmission rate. CAISO explains, moreover, that any resource not currently in an EIM Entity BAA can dynamically schedule into the CAISO EIM and therefore would be able to receive the benefits of the EIM, including the removal of pancaked rates for EIM transfers.

147. To support the characterization that the EIM represents qualitatively different service compared to CAISO's day-ahead and 15-minute market exports, CAISO explains that EIM transfers are dynamically set every five minutes and are not guaranteed to transfer outside of the five-minute dispatch. By contrast, day-ahead and 15-minute exports are static transactions that will not be curtailed (except in emergency situations) and will not be exposed to congestion costs.²³⁴ Additionally, CAISO argues that there is no exchange of forward transmission capacity between EIM Entity BAAs. Finally, CAISO reiterates that any BAA that wishes to join the EIM will benefit from the removal of pancaked rates in the EIM.

148. CAISO responds that there is no evidence to support the concern that the removal of pancaked rates in the EIM will lead to customers moving their transactions from the CAISO day-ahead and 15-minute markets into the EIM.²³⁵ CAISO explains that it will evaluate whether or not the EIM is causing a shift in transactions from its other markets to the EIM and will propose solutions if they are warranted.

149. CAISO argues that both CAISO and PacifiCorp have mutually agreed to accept a potential reduction in wheel-through revenues for the economic benefits that the EIM will provide.²³⁶ Further, CAISO argues that none of its customers that would be affected by a reduction in wheel-through revenue have complained about the proposed removal of pancaked rates for EIM transfers.

²³³ *Id.* at 56.

²³⁴ *Id.* at 57.

²³⁵ *Id.* at 62.

²³⁶ *Id.* at 65.

150. Six Cities request that the Commission not accept BPA's suggestion to remove all wheeling access charges for exports from CAISO.²³⁷ While Six Cities do not comment on the proposal not to charge EIM transfers the wheeling access charge, they state that the removal of wheeling access charges for all exports from CAISO would result in higher transmission charges for load in CAISO and would be inconsistent with the Commission's cost causation principles.

151. Six Cities claim that it would be inappropriate for transmission service costs to be included in default energy bids for generation in the PacifiCorp BAAs. Six Cities argue that including transmission service costs is inconsistent with the reciprocal transmission agreement proposed by CAISO and PacifiCorp. Six Cities state that EIM participating load in CAISO would be subject to undue discrimination in terms of transmission charges compared to EIM participating load located outside of CAISO.²³⁸

152. PacifiCorp asserts that the exemption of wheeling access charges for EIM transfers is not unduly discriminatory.²³⁹ Noting that BAAs located outside of the EIM are not similarly situated to, nor do they face the same obligations as, EIM Entity BAAs, PacifiCorp argues that the differential treatment of the two groups in regards to transmission charges is justified. PacifiCorp also asserts that the exemption from wheeling access charges does not result in preferential treatment of PacifiCorp resources.²⁴⁰ PacifiCorp argues that both CAISO and PacifiCorp resources benefit from CAISO's reciprocal transmission proposal and asserts that CAISO resources will benefit more than PacifiCorp resources. PacifiCorp also states that any resource within a participating EIM Entity BAA will receive reciprocal transmission treatment and any BAA may join the EIM. Further, PacifiCorp clarifies that resources located in the PacifiCorp BAAs will need to purchase transmission rights to participate in the EIM. According to PacifiCorp, this will ensure that EIM Participating Resources do not unreasonably shift their costs to those transmission customers who do not participate in the EIM.

²³⁷ Six Cities Answer at 2-3.

²³⁸ *Id.* at 5.

²³⁹ PacifiCorp Answer at 5.

²⁴⁰ *Id.* at 6.

Commission Determination

153. We accept CAISO's proposal regarding reciprocal transmission charges with other EIM Entity BAAs. We find CAISO's proposal not to charge EIM transfers the wheeling access charges to be just and reasonable and not unduly discriminatory. We find that EIM transfers are not similarly situated to other CAISO exports for the purpose of CAISO's transmission rate proposal. Rather, the EIM represents a sufficiently different market structure to justify different rate treatment of EIM transfers and other CAISO exports. One such difference is the fact that CAISO has dispatch authority over EIM Participating Resources in both the CAISO BAA and in the EIM Entity BAAs. CAISO's reciprocal transmission proposal allows for similar treatment of transmission charges when compared with transmission charges in the CAISO market (load-serving entities pay the transmission access charge and resources are only assessed a wheeling access charge for exports), except here the market has been expanded to the EIM.

154. Additionally, we note that there are also differences in transmission service between forward market exports (exports scheduled in the day-ahead and 15-minute markets) and EIM transfers.²⁴¹ Therefore, even if an EIM transfer uses the same transmission facilities as other CAISO exports, as some commenters argue, we find it just and reasonable that CAISO charges differently for these transactions because there are underlying differences in transmission service that allow for different rate treatment.

155. Many of the comments submitted in this proceeding focus on the Commission's past treatment of both inter-RTO and intra-RTO transmission rates. As a matter of policy, the Commission generally has not required the elimination of inter-RTO rate pancaking, but has required the elimination of intra-RTO rate pancaking.²⁴² The circumstances presented here—an energy imbalance market utilizing an existing ISO's market software beyond the borders of that ISO—do not fall precisely under either circumstance. However, we believe that some of the goals that led to the formation of the EIM (e.g., enhanced efficiency and reliability) can be met using some of the same tools utilized by RTOs.

²⁴¹ See CAISO Answer at 57. CAISO explains that EIM transfers are dynamically set every five minutes and are not guaranteed to transfer outside of the five-minute dispatch. In contrast, day-ahead and 15-minute exports are static transactions that will not be curtailed (except in emergency situations) and will not be exposed to congestion costs.

²⁴² Order No. 2000, FERC Stats. & Regs. ¶ 31,089 at 31,083, 31, 174-31,175.

156. One such tool is the elimination of pancaked transmission rates within the EIM. Given that the EIM is one market dispatched by CAISO, we find that the elimination of the seam between CAISO and the EIM Entity BAAs promotes more efficient and competitive electricity markets, provides customers in the EIM and in CAISO access to additional energy supplies, decreases the number of transactions that must pay pancaked rates, and therefore enhances competitive electricity markets in the region. This competition should result in downward pressure on market prices, resulting in lower energy costs overall and thus benefitting native load customers in CAISO and in an EIM Entity BAA who largely bear transmission costs.

157. In *Illinois Power Company*, the Commission allowed for non-pancaked rates between two RTOs but allowed pancaked rates for entities outside of the two RTOs. Specifically, the Commission allowed the single rate for participants within the two RTOs but not for other entities because (1) the non-pancaked “rate creates a benefit for customers” within the RTOs; (2) the non-pancaked rate “may provide to [RTO] customers additional supply alternatives that might otherwise be uneconomic”; and (3) the application of pancaked transmission rates to transmission outside of an RTO “serves as an incentive to transmission owners that are not currently members...to join one of those organizations.”²⁴³ Similarly, in regard to the EIM, we find that the proposed non-pancaked rate provides a benefit to EIM participants and an incentive for EIM participation that need not be offered to non-EIM entities.

158. In response to commenters asserting that CAISO’s proposal is not truly reciprocal because EIM resources in PacifiCorp’s BAAs are required to purchase transmission, we find these comments to be outside the scope of this proceeding because those arguments pertain to PacifiCorp’s separate proposal. Issues relating to PacifiCorp’s EIM proposal are addressed in the order issued in Docket No. ER14-1578-000.

159. Regarding WPTF’s concern that, when PacifiCorp wheels through CAISO to another EIM Entity, it will not pay CAISO wheeling access charges, we note that the party receiving the energy in the EIM Entity BAA would pay the transmission charge in the BAA where the energy sinks. In addition, as CAISO states in its answer, no EIM transfers will be eligible for export outside of the EIM footprint, so a transfer from an EIM Entity BAA that sinks outside the EIM would be assessed CAISO’s wheeling access charge.

²⁴³ *Ill. Power Co.*, 95 FERC at 61,644, *reh’g denied*, 96 FERC ¶ 61,026 (2001).

160. Finally, we note that CAISO has committed to commencing a stakeholder process within the first year of implementation to evaluate the need, if any, to adjust transmission charges for EIM transfers. We note that the current CAISO proposal may not be the only just and reasonable proposal regarding EIM transmission rates and will consider an alternative proposal if one is filed.

c. Allocation of Uplift Charges to EIM Transfers

Background

161. CAISO proposes to define an “EIM Transfer” as “the transfer of Energy in Real-Time between an EIM Entity [BAA] and the CAISO [BAA], or between EIM Entity [BAAs], using transmission capacity made available to the Real-Time Market through the [EIM]. The EIM Transfer is not a Real-Time Export Schedule or a Real-Time Interchange Import Schedule.”²⁴⁴

Comments

162. Powerex contends that CAISO’s proposed definition of “EIM Transfer” serves to categorically exclude EIM transfers from being allocated CAISO uplift costs that are charged to *all other* exports.²⁴⁵ For example, Powerex states that by excluding EIM transfers from the definition of Real-Time Interchange Export Schedule, CAISO’s proposed definitions will prevent allocation of uplift charges to EIM transfers.

163. Portland General, Powerex, and WPTF argue that CAISO’s proposal to exempt EIM participants from CAISO uplift charges for energy exported out of CAISO could be discriminatory, affording CAISO EIM Entities a competitive advantage over non-EIM CAISO participants. These parties assert that both entities participating in the EIM and those CAISO participants not participating in the EIM will be bidding into the same market, but the pricing inequities will only be imposed on those not participating in the EIM who will be wheeling the same exported intertie energy to serve load outside of California.²⁴⁶ Portland General requests the Commission require CAISO to ensure that the EIM is structured in a way that does not unduly disadvantage non-EIM participants.

²⁴⁴ See CAISO Tariff, proposed Appendix A (Master Definition Supplement).

²⁴⁵ Powerex Protest at 26.

²⁴⁶ Portland General Comments at 7; WPTF Comments at 4; Powerex Protest at 19-20, 26-32, 39.

Answer

164. In response to arguments above, CAISO counters that EIM transfers will pay a fair share of uplift charges. CAISO explains that proposed sections 11.5.4.1 and 11.8.6.3.2 of its tariff apportion uplift costs according to the amount attributable to each EIM Entity BAA, including the “EIM exports” to which Powerex refers.²⁴⁷ CAISO explains that Powerex mistakes the definition of “EIM Measured Demand” for that of “CAISO Measured Demand,” which correctly excludes EIM Transfers. CAISO asserts that including EIM transfers as a component of “CAISO Measured Demand” would result in an inappropriate double charge of such transfers, i.e., both BAAs would pay the uplifts associated with the charge.²⁴⁸

Commission Determination

165. We accept CAISO’s proposal regarding the allocation of uplift charges to EIM Transfers. First, Portland General, Powerex, and WPTF are incorrect in asserting that no uplift charges will be allocated to EIM transfers that are charged to all other exports. We find that proposed sections 11.5.4.1 and 11.8.6.3.2 of CAISO’s tariff clearly allocate the Real-Time Congestion Offset, Real-Time Imbalance Energy Offset, Net Residual Unit Commitment Bid Costs, and Real-Time Bid Costs to the BAA in the EIM area. Second, in attempting to show that CAISO’s proposal excludes the allocation of uplift to EIM Transfers, Powerex confuses the definition of “CAISO Measured Demand” with “EIM Measured Demand.” We therefore reject commenters’ arguments.

d. Centralized Counterparty

Background

166. In its filing, CAISO proposes that neither it nor the EIM Entity will be a “Purchasing Selling Entity” for purposes of e-Tagging of EIM transfers.²⁴⁹ CAISO goes on to state that title for the energy in the real-time market passes directly from the entity that holds title when the energy enters the CAISO controlled grid or the transmission system of an EIM transmission service provider, whichever is first following dispatch, to the entity that removes the energy from the CAISO controlled grid or the transmission

²⁴⁷ CAISO Answer at 43.

²⁴⁸ *Id.*

²⁴⁹ CAISO Transmittal Letter at 22.

system of an EIM transmission service provider, whichever last precedes delivery to load.²⁵⁰

Comments

167. Powerex alleges that CAISO's proposal is incompatible with serving as the "centralized counterparty," as defined by the Commission in Order No. 741.²⁵¹ Powerex notes that in Order No. 741²⁵² the Commission established the centralized counterparty construct as an option to protect ISOs and RTOs, in the case of a market participant declaring bankruptcy, from having to pay amounts due to a market participant without being able to net amounts the market participant owes. Powerex claims that the goal was to provide ISOs and RTOs wishing to serve as the centralized counterparty the ability to clarify their "legal status *to take title to* transactions, thereby becoming the central counterparty for transactions in an effort to establish mutuality in the transactions as legal support for set-off in bankruptcy."²⁵³ Powerex asserts that CAISO's unwillingness to take title to energy associated with EIM transfers is inconsistent with its decision to serve as the centralized counterparty to the sales in its market.²⁵⁴

Answer

168. In its answer, CAISO asserts that its proposed EIM filing with regard to centralized counterparty obligations is consistent with its Order No. 741 compliance filing that was accepted by the Commission.²⁵⁵

²⁵⁰ *Id.*

²⁵¹ Powerex Protest at 90.

²⁵² *Credit Reforms in Organized Wholesale Electric Markets*, Order No. 741, FERC Stats. & Regs. ¶ 31,317 (2010) (Order No. 741), *order on reh'g*, Order No. 741-A, FERC Stats. & Regs. ¶ 31,320, *order denying reh'g*, Order No. 741-B, 135 FERC ¶ 61,242 (2011).

²⁵³ Powerex Protest at 90 (quoting Order No. 741, FERC Stats. & Regs. ¶ 31,317 at P 82 (emphasis added)).

²⁵⁴ *Id.*

²⁵⁵ *See Cal. Indep. Sys. Operator Corp.*, 142 FERC ¶ 61,111 (2013).

Commission Determination

169. We conditionally accept CAISO's proposal, subject to CAISO making a compliance filing within 30 days after the date of issuance of this order revising proposed section 29.22 of its tariff so that CAISO takes title to energy associated with EIM transfers consistent with its role as the centralized counterparty.

170. The establishment of ISOs and RTOs as the centralized counterparty in all market transactions was a major element of Order No. 741. In Order No. 741, the Commission found that the ability of an ISO or RTO to "net" market obligations for the purposes of setting collateral requirements was vulnerable to a challenge by a participant in bankruptcy that the ISO and RTO had not established "mutuality."²⁵⁶ The ability to establish "mutuality" was viewed as the best practice in established bankruptcy precedent to allow "netting" of market obligations. Without this protection, a bankrupt market participant could assert that it was owed any payment for energy sold but that it could not "owe" any payment for energy received or other obligations. This would not only cause great disruption to the cash-flow of other market participants but would possibly lead to collateral obligations based on "gross" market activity (both money owed and money to be paid) which would be a large encumbrance to market participant balance sheets and could lead to higher costs to consumers.

171. In its order on CAISO's Order No. 741 compliance filing, the Commission agreed with CAISO's request that its role as the centralized counterparty in all market obligations did not require CAISO to be the owner of e-Tags that would be used by CARB to establish responsibility for procuring emissions permits.²⁵⁷ However, this exception to the CAISO centralized counterparty role was applied *only to e-Tags*, not to energy sold into its real-time market, which would include EIM transfers. Therefore, we find that CAISO's proposal in this regard is inconsistent with our findings on CAISO's Order No. 741 compliance filing. Accordingly, we direct CAISO to make a compliance filing within 30 days after the date of issuance of this order revising proposed section 29.22 so that CAISO takes title to energy associated with EIM transfers consistent with its role as the centralized counterparty.

²⁵⁶ See Order No. 741, FERC Stats. & Regs. ¶ 31,317 at PP 94, 119.

²⁵⁷ See *Cal. Indep. Sys. Operator Corp.*, 140 FERC ¶ 61,169, at PP 27-28 (2012).

e. **Convergence Bidding Uplift**

Background

172. CAISO will operate its day-ahead market (with convergence bidding) as well as the EIM in the real-time market. However, because the EIM only involves the extension of CAISO's real-time market, and not its day-ahead market, to new BAAs, the proposed tariff revisions do not provide for convergence bids in EIM Entity BAAs. To account for this difference in market structure, CAISO will insert each EIM Entity's base schedule forecast (as discussed in more detail above) into the day-ahead schedule. These EIM forecasts, however, are not financially binding for the EIM Entities, and CAISO will not enforce the modeled EIM transmission constraints until the real-time market.²⁵⁸

173. CAISO states that some stakeholders have raised concerns that the participation of convergence bids in CAISO's day-ahead market after implementation of the EIM could increase the amount of the real-time congestion offset charged to market participants in CAISO's BAA.²⁵⁹ CAISO asserts that this potential is not a new issue stemming from the EIM. The potential for convergence bidders to take advantage of differences in the approaches employed to model the day-ahead market and the real-time market in a way that increases the uplift associated with real-time congestion currently exists and has little, if anything, to do with the EIM. CAISO states that it is addressing these concerns through a separate initiative to enhance and expand the modeling of the full network model to more effectively model grid operations by better reflecting conditions outside its boundaries and to help manage the impacts of unscheduled flows on the EIM area and CAISO.²⁶⁰

Comments

174. Six Cities, SoCal Edison, and the CPUC argue that the inherent differences in the day-ahead market and the EIM real-time market present added complexity to CAISO's efforts to have the day-ahead market accurately reflect what happens in real time and that, to the extent convergence bidders discover systematic differences in the errors from this activity, they can unfairly profit by taking positions against CAISO's forecast error,

²⁵⁸ CAISO Transmittal Letter at 23-24.

²⁵⁹ *Id.* at 34.

²⁶⁰ *Id.*

which in turn creates uplift to load.²⁶¹ SoCal Edison states that CAISO's Market Surveillance Committee investigated this issue and concurred that this is a valid concern, but was unable to draw any conclusions on the dollar impact and recommended the issue be studied during market simulation.²⁶² Six Cities contend that it is not appropriate to implement a market design change that will result in differences between the day-ahead and real-time markets without consideration of the potential effects on uplift costs paid by load.²⁶³ PG&E recommends that CAISO provide an analysis of uplift costs similar to the periodic reports on market performance provided by CAISO's Department of Market Monitoring.²⁶⁴ SoCal Edison states that the Commission should require CAISO to hold a stakeholder process to develop a proposal to address convergence bidding uplift created as a result of the EIM design as well as report the impact of the EIM on congestion rent shortfalls due to convergence bidding, and present a proposal to resolve this and other design issues by October 2015.²⁶⁵

175. SoCal Edison believes that the full network model framework to be proposed by CAISO at a later date, as well as alternatives to that framework, could be viable solutions.²⁶⁶ However, Six Cities contend that there is no reason to anticipate that improvements in the modeling of the day-ahead process will be sufficient to offset potential impacts resulting from the EIM, and that even if the improved day-ahead model were to be accurate, the implementation of the EIM will change the resource utilization pattern in real-time. Six Cities argue that because the EIM will function as a single, integrated-real-time market, changes from the day-ahead market are likely to affect nodes internal to CAISO separate and apart from the effects of constraints in an EIM Entity BAA.

176. Six Cities state that in a recent order conditionally accepting CAISO's tariff amendments to implement a 15-minute market design, the Commission conditioned acceptance of CAISO's proposal to "reinstate convergence bidding, 12 months after

²⁶¹ Six Cities Comments at 4; SoCal Edison Comments at 15; CPUC Comments at 3.

²⁶² SoCal Edison Comments at 16.

²⁶³ Six Cities Comments at 5.

²⁶⁴ PG&E Comments at 10.

²⁶⁵ SoCal Edison Comments at 16-17.

²⁶⁶ *Id.* at 17.

implementation of the 15-minute market, on CAISO filing a report to demonstrate that the new market structure is providing the expected price convergence.”²⁶⁷ Six Cities urge the Commission to require CAISO to submit a comparable report evaluating the potential effects of convergence bidding under the EIM design, including an analysis of the costs versus benefits of convergence bidding, and, to the extent expected benefits do not justify anticipated costs, proposing remedial measures.²⁶⁸

177. WPTF argues that a CAISO convergence bidder’s presumed flows may impact an EIM constraint in the direction of its congestion in real-time (contributing to the cost of the constraint’s congestion) or in the direction opposite to the congestion in real-time (alleviating the constraint’s congestion costs). WPTF argues that it is not reasonable that CAISO’s proposal does not similarly provide a credit to the convergence bidder when its convergence bids alleviate EIM participants’ congestion costs. WPTF contends that a symmetrical treatment of convergence bids would create smooth and predictable congestion results in the EIM that may enable EIM participants’ forward activities and improve incentives.²⁶⁹

178. SDG&E states that the planned EIM market simulations provide an opportunity to explore whether convergence bidding could have unintended impacts on the operation of the EIM, whether the LMPs used to settle imbalance services outside CAISO’s BAA fairly reflect the marginal cost of providing imbalance services at those locations, and whether there are other operational or settlement issues that would require modification to the proposed EIM before it becomes binding on participants.²⁷⁰

Answer

179. In its answer, CAISO argues that convergence bids do not cause the system differences that can lead to uplifts. Instead, CAISO contends that these are caused by flow impacts originating outside its system.²⁷¹ CAISO states that the appropriate response is to remedy any underlying modeling issues and that it is addressing these

²⁶⁷ Six Cities Comments at 5-6 (citing *Cal. Indep. Sys. Operator Corp.*, 146 FERC ¶ 61,204, at P 103 (2014)).

²⁶⁸ *Id.* at 6.

²⁶⁹ WPTF Comments at 6.

²⁷⁰ SDG&E Comments at 5.

²⁷¹ CAISO Answer at 46.

matters in its separate full network model expansion proposal that was approved by CAISO's Board and is expected to be filed with the Commission in the near future.²⁷² Lastly, CAISO disagrees with WPTF and states that providing a credit would provide create avenues to the type of convergence bidding positions designed to exploit the failure to enforce constraints within an EIM Entity BAA.

180. CAISO contends that SoCal Edison's request to require CAISO to present a plan to resolve the impact of EIM base schedule errors on convergence bidding uplift within a year of the implementation of the EIM is outside the scope of this proceeding. CAISO states that issues associated with convergence bidding already have been addressed.²⁷³

Commission Determination

181. We accept CAISO's proposal to insert each EIM Entity's base schedule forecast into the day-ahead schedule. The potential for price separation between day-ahead and real-time markets is not new, and can be affected by the quality of CAISO's modeling and its ability to predict real-time conditions in the day-ahead model. CAISO's proposal includes a mechanism to incorporate expected EIM results into the day-ahead market. The quality of this modeling effort may determine the extent to which price separation between the day-ahead and real-time market occurs. Further, existing modeling and market price separation can be affected by conditions, such as loop-flow, arising outside CAISO's borders. Enhanced insights into markets outside CAISO from the addition of balancing authorities in the EIM, as well as CAISO's full network model proposal, may improve CAISO's modeling and convergence of prices in the two markets. Our review of CAISO's full network model filing in Docket No. ER14-2017-000 will determine whether that proposal is just and reasonable under the FPA.

182. We do not believe that a comparable report to the one required in the March 20, 2014 order on CAISO's 15-minute market filing is necessary here.²⁷⁴ The concerns presented in this proceeding regarding convergence bidding are different and distinct from those in CAISO's 15-minute market filing. Specifically, that proceeding dealt with reinstating convergence bidding at CAISO external interties, whereas the current proceeding raises concerns about convergence bidding and the use of forecast EIM base schedules. We note that the potential magnitude of uplifts due to congestion caused by

²⁷² *Id.* at 11. CAISO's proposed tariff revisions implementing the full network model expansion were filed on May 22, 2014 in Docket No. ER14-2017-000.

²⁷³ *Id.* at 92.

²⁷⁴ *See Cal. Indep. Sys. Operator Corp.*, 146 FERC ¶ 61,205 (2014).

convergence bidders will be evaluated during the market simulation prior to commencement of the EIM. Additionally, CAISO has stated that it will prepare metrics to evaluate the benefits of the EIM. Once the EIM is operational, we expect CAISO will report on these metrics as a regular part of its ongoing market performance reporting efforts.

183. Lastly, we are not persuaded by WPTF's concerns. To the extent that providing a credit to a convergence bidder when its bid alleviates congestion costs could lead to convergence bidding strategies to exploit the failure to enforce constraints within an EIM Entity BAA, remedying the underlying modeling issues should address this concern.

f. Administrative Fee

Background

184. CAISO proposes to charge EIM Market Participants a fixed rate administrative fee of \$0.19/MWh.²⁷⁵ This fee is charged to EIM Market Participants based on the greater of: (1) the gross absolute value of the participant's imbalance energy supply and load; or (2) five percent of the total gross absolute value of supply and five percent of the total gross absolute value of demand of all EIM Market Participants. CAISO explains that it derived this fee by determining the amount attributable to the real-time market for the market services and system operations cost components of its grid management charge.²⁷⁶ CAISO then used the 2012 rates and allocation from its 2010 cost of service study to derive the rate of operation for the real-time market. CAISO commits to propose an updated administrative fee when it prepares a new cost of service study for the 2015 grid management charge.²⁷⁷

Comments

185. Modesto asserts that stakeholders should be able to take a fresh look at the derivation of the EIM administrative fee as part of the stakeholder process for the new cost of service study for CAISO's 2015 grid management charge, and that the stakeholder

²⁷⁵ CAISO Transmittal Letter at 38-40; *id.*, Attachment D, Declaration of Michael K. Epstein at PP 6-9 and Exhibit 1.

²⁷⁶ *Id.* at 39; *id.* Attachment D, Declaration of Michael K. Epstein at PP 6-7 and Exhibit 1. CAISO states that the grid management charge will be reduced by the revenues from the administrative fee, so as to remain revenue neutral. *Id.* at 40.

²⁷⁷ *Id.* at 39-40.

process should demonstrate how any ongoing EIM administrative fee is derived from the 2015 updated cost of service study, instead of the older 2010 data currently being used.²⁷⁸ Modesto also states that the stakeholder process should verify that the costs of operating the EIM are only being paid by those entities using the EIM.²⁷⁹ Six Cities observe that the EIM design does not provide for the evaluation of costs of terminating EIM participation, and request that a provision be added to both identify, and hold the withdrawing BAA accountable for, costs attributable to withdrawal of a BAA from the EIM.²⁸⁰

186. PacifiCorp does not express substantive concerns with the administrative fee, but proposes three clarifying revisions to proposed section 29.11(i) of CAISO's tariff.²⁸¹ First, PacifiCorp requests that proposed section 29.11(i)(2) be revised to reflect that the calculation of MWh subject to the EIM administrative charge will be performed only once for all EIM Market Participants within a BAA (and not as a separate calculation for each EIM Entity Scheduling Coordinator and EIM Participating Resource Scheduling Coordinator).²⁸² Next, PacifiCorp requests that proposed section 29.11(i)(3) be revised to clear up confusion from wording regarding "remaining amounts" from the allocation of a sum.²⁸³ Finally, PacifiCorp recommends that proposed section 29.11(i) be revised, consistent with what PacifiCorp believes to be CAISO's intent, to reflect that the \$0.19/MWh fee will be multiplied by the sum of the imbalance energy identified in section 29.11(i)(3)(i) and, if the resulting amount is *less than* the amount calculated pursuant to section 29.11(i)(2)(i) and (ii), the "remaining amounts" are then allocated to the EIM Entity Scheduling Coordinator, pursuant to section 29.11(i)(2)(ii).²⁸⁴

²⁷⁸ Modesto Comments at 4-5.

²⁷⁹ *Id.* at 5.

²⁸⁰ Six Cities Comments at 12.

²⁸¹ PacifiCorp Comments at 9-11.

²⁸² *Id.* at 10.

²⁸³ *Id.*

²⁸⁴ *Id.* at 10-11.

Answers

187. In its answer, CAISO asserts that the 2010 cost of service study remains the best information available to calculate the administrative fee pending the 2015 update to the grid management charge and that, in any event, the administrative fee based on this data is only expected to be in effect for three months before being updated.²⁸⁵ CAISO also states that stakeholders will have a full opportunity to examine the data that will support the updated charge in connection with the 2015 grid management charge update, and to participate in the process to establish the EIM administrative charge, which will be filed with the Commission later this year.²⁸⁶ In response to Six Cities, CAISO and PacifiCorp each contend that the initial recovery of implementation costs, in combination with the ongoing administrative charge, effectively means that there will be no stranded costs from an EIM Entity exiting the market.²⁸⁷ CAISO also notes that “[i]mposing a future look back cost exposure risk on EIM Entities would represent an unnecessary barrier to their participation.”²⁸⁸ PacifiCorp points to the analogous circumstance in CAISO’s current tariff where there is no exit fee to recover costs when a participating transmission owner voluntarily leaves CAISO, even though CAISO had presumably modified its systems to accommodate the new facilities, entitlements, and settlement responsibilities resulting from the participating transmission owner’s participation.²⁸⁹

188. CAISO agrees that PacifiCorp’s requested revisions to proposed 29.11(i) will help clarify participants’ understanding of the EIM administrative charge.²⁹⁰ CAISO requests that the Commission direct it on compliance to propose edits to section 29.11(i) to address PacifiCorp’s concerns. CAISO states that it will then submit revisions that clarify that the calculation will be performed once for all EIM Market Participants within each EIM Entity BAA, and that more clearly set forth the calculation to be performed and the amounts to be allocated to scheduling coordinators in the EIM.

²⁸⁵ CAISO Answer at 66.

²⁸⁶ *Id.* at 66-67.

²⁸⁷ *Id.* at 67; PacifiCorp Answer at 23-24.

²⁸⁸ CAISO Answer at 68.

²⁸⁹ PacifiCorp Answer at 24.

²⁹⁰ CAISO Answer at 68.

Commission Determination

189. We conditionally accept CAISO's proposed administrative fee, subject to making a compliance filing within 30 days after the date of issuance of this order, as discussed below. We find that the proposed fee fairly allocates the cost of providing real-time service to EIM Market Participants. We expect CAISO to work with stakeholders, in conjunction with the ongoing 2015 grid management charge update process and the subsequent process to establish the EIM administrative charge, to ensure that the administrative charge accurately reflects the costs of providing this service based on current information.

190. We direct CAISO to submit revisions within 30 days after the date of issuance of this order addressing the concerns raised by PacifiCorp. Specifically, as contemplated in CAISO's answer, we direct CAISO to submit revisions to proposed section 29.11(i) to: (1) clarify that CAISO will calculate the MWh subject to the administrative fee once for all EIM Market Participants in an EIM Entity's BAA; (2) address any inconsistency between the language in proposed section 29.11(i)(3)(i) and 29.11(i)(3)(ii); and (3) make clear that the fee will be multiplied by the sum of imbalance energy identified in section 29.11(i)(3)(i) and, if the resulting amount is less than the amount calculated pursuant to section 29.11(i)(2)(i) and (ii), will allocate the remaining amounts to the EIM Entity Scheduling Coordinator pursuant to section 29.11(i)(2)(ii).

g. Settlements

Background

191. CAISO proposes to use the settlements procedures and timelines set forth in existing section 11 and proposed section 29.11 of its tariff for settling and billing EIM Market Participants.²⁹¹ Proposed section 29.13 provides that disputes associated with participation in the EIM will be subject to section 11.29.8 of CAISO's tariff. Pursuant to section 11 of the current tariff, customers have 22 business days from issuance of their Recalculation Settlement Statements to raise a dispute or report an exception.²⁹²

²⁹¹ CAISO Transmittal Letter at 30.

²⁹² CAISO Tariff, section 11.29.8.3.2.

Comments

192. CARB states in its comments that the EIM settlement structure has been discussed and vetted through fulsome stakeholder proceedings, and results in a design that facilitates the integration of renewable resources.²⁹³

193. PacifiCorp requests that CAISO reevaluate the appropriateness of applying the 22-day review window in CAISO's current settlement procedures to the EIM.²⁹⁴ PacifiCorp suggests that 22 days is too short of a timeframe for it to process the EIM settlement statement from CAISO and pass the sub-allocation on to its transmission and/or interconnection customers in accordance with its monthly billing cycle, while still providing those customers an adequate period to review the statements and identify any disputes for PacifiCorp to raise with CAISO. PacifiCorp explains that it requested during the stakeholder process that CAISO extend the timeframe for EIM Market Participants to dispute settlements from 22 business days to 55 business days, but that CAISO has declined to make this modification.²⁹⁵ PacifiCorp does not request that the Commission direct CAISO to modify its proposal at this time, but submits that its requested extension may ultimately be necessary if the existing timeline proves too restrictive to permit PacifiCorp to fully defend its customers' rights.

Answer

194. PG&E asserts in its answer that, should CAISO comply with PacifiCorp's request to reevaluate settlement timing, such evaluation should ensure that all CAISO market participants are provided with the same amount of time for settlement review.²⁹⁶

Commission Determination

195. While we encourage CAISO and PacifiCorp to continue to work together to ensure that participants in the EIM have a meaningful opportunity to review EIM-related settlement statements and raise disputes, we find that CAISO's proposed treatment of EIM billing and settlement matters, including proposed section 29.13 of its tariff, is just and reasonable. We therefore accept it. We note that the related issue of the interaction of PacifiCorp's proposed treatment of EIM-related disputes with this provision is

²⁹³ CARB comments at 2.

²⁹⁴ PacifiCorp Comments at 8-9.

²⁹⁵ *Id.* at 9.

²⁹⁶ PG&E Answer at 5.

addressed in additional detail in the order issued concurrently in Docket No. ER14-1578-000.

4. Market Power Mitigation

Background

196. CAISO proposes to extend its existing market monitoring and real-time local market power mitigation tariff provisions to the EIM.²⁹⁷ Under proposed section 29.38, its Department of Market Monitoring will provide market monitoring services for the EIM. CAISO also proposes to apply essentially the same real-time local market power mitigation procedures as those applicable in current CAISO tariff section 39.7—i.e., local market power mitigation for energy bids within each EIM Entity BAA.²⁹⁸

197. CAISO explains that several stakeholders, the Market Surveillance Committee, and the Department of Market Monitoring have expressed concern that there may be BAA-wide market power in an EIM Entity's BAA when all or most of the generation in the BAA is owned by one entity.²⁹⁹ CAISO states that such structural market power could be mitigated effectively by extending local market power mitigation procedures to the EIM Entity BAA when congestion is projected to occur on a transmission intertie into an EIM Entity BAA due to an EIM transfer limit on the intertie. In this order, we refer to this type of mitigation as “market power mitigation on EIM interties.”

198. CAISO states that it has built the software functionality into the EIM to implement real-time local market power mitigation on EIM interties if necessary. CAISO represents that the Department of Market Monitoring is currently studying whether structural market power exists within PacifiCorp's two BAAs based on potential supply and demand conditions under the EIM. The study will assess the degree to which PacifiCorp may be pivotal with respect to supply of imbalance energy needed to meet other entities' imbalance energy needs, and whether real-time local market power mitigation should be activated.

²⁹⁷ CAISO Transmittal Letter at 40-42.

²⁹⁸ See CAISO Tariff, proposed section 29.39. Section 39.7 of CAISO's tariff sets forth procedures for calculation of default energy bids and competitive path designation.

²⁹⁹ CAISO refers to this as “structural market power.”

199. Therefore, CAISO's proposed tariff revisions provide that the Department of Market Monitoring *may* study structural market power within an EIM Entity BAA prior to or subsequent to EIM implementation for any EIM Entity.³⁰⁰ CAISO also proposes that, based on the Department of Market Monitoring's assessments, it may activate or deactivate market power mitigation on EIM interties, subject to Board authorization.

Comments

200. SDG&E states that the EIM increases the number of suppliers of imbalance service and, therefore, is an antidote to the exercise of market power.³⁰¹ Wind Parties and PacifiCorp also support CAISO's proposed real-time local market power mitigation approach.³⁰²

201. Powerex asserts that PacifiCorp is, and any future BAA seeking to join EIM likely will be, the dominant supplier in its own BAA.³⁰³ Powerex asserts that whether this dominance raises market power concerns depends on whether PacifiCorp or any future EIM Entities seek to change the price for imbalance services they provide under their OATTs. Therefore, according to Powerex, market power mitigation issues should be reviewed by the Commission in the context of PacifiCorp's or future EIM Entities' OATT filings and not be left to across-the-board bid mitigation at the discretion of CAISO's Board following a study by the Department of Market Monitoring. Powerex also argues that if an EIM Entity seeks to charge EIM market prices for balancing ancillary services under schedules 4 and 9 its OATT, there are superior ways for the Commission to address market power concerns.³⁰⁴ Powerex asserts that mitigating the bids of all resources out of concern for one EIM Entity's market power is inequitable and will deter participation in the EIM.

³⁰⁰ CAISO Transmittal Letter at 40-41; CAISO Tariff, proposed section 29.39(d).

³⁰¹ SDG&E Comments at 4.

³⁰² PacifiCorp Comments at 7; Wind Parties Comments at 8.

³⁰³ Powerex Protest at 74-75.

³⁰⁴ *Id.* at 75-76. Powerex suggests that charging OATT customers preexisting rates for balancing services or capping balancing services rates to preexisting rates are examples of superior market power mitigation measures.

202. BPA is concerned that PacifiCorp will potentially have market power in its BAAs as no other entity is set to participate in the EIM in PacifiCorp's two BAAs.³⁰⁵ Therefore, BPA argues that CAISO should prepare to initiate market power mitigation measures on PacifiCorp generation, beginning at start-up of the EIM, if market power becomes apparent during the market simulation phase of EIM roll out.

203. Six Cities strongly disagree with CAISO's proposal to presume that interties among BAAs participating in the EIM are competitive and assert that local market power mitigation should be applied to the interties, and therefore across the entire EIM area.³⁰⁶ Six Cities argue that potential market power in PacifiCorp's BAAs exists because of the limited transfer capability between CAISO and PacifiCorp and the fact that participating resources in PacifiCorp BAAs are primarily owned by PacifiCorp. In addition, Six Cities are concerned that a resource in one EIM Entity BAA may have market power in relation to a transmission constraint in another EIM Entity BAA. Therefore, Six Cities suggest that bids by resources with market power should be mitigated regardless of the location of the constraint.

204. UAMPS contends that, given the lack of transmission capacity into the PacifiCorp West BAA, it is a forgone conclusion that PacifiCorp will have market power in that BAA. UAMPS does not believe that CAISO's commitment to study structural market power is adequate. UAMPS maintains that mitigation measures should be approved before the market is approved.³⁰⁷

205. SoCal Edison asserts that PacifiCorp owns or controls 92 percent and 78 percent of generation in the PacifiCorp West and PacifiCorp East BAAs, respectively.³⁰⁸ Given this concentration of generation ownership, and the fact that there is limited EIM transfer capability into the PacifiCorp BAAs to allow CAISO resources to contest and discipline EIM prices in the PacifiCorp BAAs, SoCal Edison urges that market power analysis and mitigation measures be in place before EIM start-up. SoCal Edison asks that CAISO file its market power methodology and analysis with the Commission. Likewise, WPTF also suggests that the results of the proposed market power study by the Department of Market Monitoring are very dependent on study assumptions and requests that CAISO be

³⁰⁵ BPA Comment and Protest at 10.

³⁰⁶ Six Cities Comments at 11.

³⁰⁷ UAMPS Comments at 4.

³⁰⁸ SoCal Edison Comments at 6-8.

directed to file its market power mitigation analysis and its recommendations with the Commission.³⁰⁹

206. Powerex, Portland General, Seattle, and Chelan PUD assert that CAISO-calculated default energy bids³¹⁰ are not a reliable approximation of the marginal cost of generators outside of California because much of the generation outside California is energy-limited storage hydroelectricity, and that for these resources, opportunity cost, not variable production cost, will determine the appropriate marginal cost of participation in the EIM. Powerex and Chelan PUD assert that any effort to calculate the marginal opportunity cost for hydroelectric resources will have a high error rate, which Chelan PUD asserts creates the potential for excessive mitigation.³¹¹ Powerex submits that each of CAISO's three methods for calculating default energy bids is problematic when applied to hydroelectric resources. Portland General suggests that the Commission reject CAISO's proposal until a more equitable solution can be developed.³¹²

207. Powerex further argues that the local market power mitigation approach the Commission approved for SPP is superior to CAISO's proposal.³¹³ Powerex avers that the parallels between the EIM and SPP's energy imbalance market do not require bid mitigation in the EIM to be based on the cost of new entry, as is the case in SPP. However, Powerex argues that the Commission's findings regarding SPP demonstrate that a mitigation plan that is just and reasonable for the CAISO market is not necessarily just and reasonable for an energy-only real-time imbalance market.³¹⁴

³⁰⁹ WPTF Comments at 9-10.

³¹⁰ Default energy bids are the energy bid curves used by CAISO for local market power mitigation.

³¹¹ Powerex Protest at 79; Chelan PUD Comments at 5-6.

³¹² Portland General Comments at 8; Seattle Comments at 4.

³¹³ Powerex Protest at 81 (citing *Southwest Power Pool, Inc.*, 114 FERC ¶ 61,289, at P 171 (2006)).

³¹⁴ *Id.* at 83.

208. PacifiCorp advocates a change in the way default energy bids used in local market power mitigation are calculated under the variable cost option.³¹⁵ PacifiCorp argues that PacifiCorp transmission customers with resources participating in the EIM must pay a transmission charge as a result of their participation in the EIM. Therefore, PacifiCorp argues that transmission charges must be an element of the variable cost option calculation.

209. Neighboring Systems argue that the proposed transmission rate subsidy for EIM transactions can shift trading activity from the day-ahead market to the EIM and diminish participation in and competitiveness of the day-ahead market.³¹⁶ They suggest, therefore, that market power analyses should be performed on an ongoing basis and before each new EIM participation agreement is executed, and that proper mitigation measures should be put in place before any harm occurs. Neighboring Systems also request that the tariff clarify that the Department of Market Monitoring will publish quarterly reports on the performance of the EIM.³¹⁷

210. BPA, Six Cities, and Powerex identify references in proposed section 29.39(c) of CAISO's tariff to a missing subsection.³¹⁸ BPA asserts that the missing subsection was proposed by CAISO during the stakeholder process and that without it, EIM resources may inappropriately be exempted from mitigation to relieve congestion on uncompetitive EIM transfer constraints. BPA argues that the missing subsection should be added to the tariff.³¹⁹

Answers

211. In response to Powerex's argument that structural market power issues should be addressed in an EIM Entity's OATT filing, CAISO argues that it is not appropriate to subject different regions of CAISO's real-time market to different mitigation procedures. Therefore, CAISO contends that whether transactions that may affect EIM transfer constraints are subject to the market power mitigation procedure should be governed by

³¹⁵ PacifiCorp Comments at 11.

³¹⁶ Neighboring Systems Comments at 11-12.

³¹⁷ *Id.* at 19.

³¹⁸ BPA Comment and Protest at 4; Six Cities Comments at 12; Powerex Protest at 95.

³¹⁹ BPA Comment and Protest at 4.

CAISO's tariff.³²⁰ PacifiCorp also contends that Powerex's proposal is unworkable. PacifiCorp claims that, in order to be made whole for the provision of imbalance services it provides to its transmission customers through EIM, it must be able to recover the cost of those services based on the same EIM pricing it is assessed by CAISO for imbalances.³²¹

212. CAISO disagrees with intervenors that it should implement market power mitigation on EIM interties on day one of EIM. CAISO asserts that it has chosen a balanced approach under which it will only implement market power mitigation on EIM interties if it determines, under the criteria proposed in the tariff, that there may be an insufficient amount of competitive supply to prevent exercise of market power in an EIM Entity BAA. Furthermore, CAISO argues that it will periodically reassess the competitiveness of each EIM Entity BAA using empirical data and argues that its Board is fully capable of rendering an informed, independent, and nondiscriminatory judgment based on CAISO's assessment.³²² However, CAISO suggests that it is open to the possibility that the Commission may determine that it must decide whether market power mitigation on EIM interties is appropriate and, in case of such a Commission determination, asks that the Commission do so prior to October 1, 2014. CAISO also asks that the Commission consider how subsequent determinations regarding new EIM Entities or updated analysis regarding existing EIM Entities should be handled without the need for CAISO to return to the Commission each time.³²³

213. With regard to intervenors' argument that CAISO's proposed default energy bid calculation does not properly take into account the opportunity cost of resources, especially hydroelectric resources, CAISO argues that the EIM is an extension of CAISO's existing real-time market and the same rules should apply to both. CAISO contends that there are not any untoward results from the current operation of its market power mitigation process and, given the voluntary nature of the EIM, no resource would be called upon when it is not willing to offer energy. PacifiCorp submits that hydroelectric resources can effectively participate in EIM and explains that it is working

³²⁰ CAISO Answer at 69-70.

³²¹ PacifiCorp Answer at 10-11.

³²² CAISO Answer at 72.

³²³ *Id.*

with the Department of Market Monitoring on developing default energy bids for its hydroelectric resources based on the opportunity cost of these resources.³²⁴

214. CAISO disagrees with PacifiCorp's suggestion that transmission service charges be included in the variable cost option of the default energy bid calculation. CAISO suggests that its proposed EIM tariff provisions allow for inclusion of transmission service charges under the negotiated default energy bid option. CAISO commits to provide more detail in this regard in the EIM business practice manual.³²⁵

215. CAISO agrees that proposed tariff section 29.39(c) incorrectly cross-references a nonexistent section. CAISO claims that the nonexistent section was moved during the tariff drafting process and requests that the Commission direct it to correct this error on compliance.³²⁶

Commission Determination

216. We accept, subject to conditions, CAISO's proposal regarding EIM real-time local market power mitigation, but reject, as discussed below, CAISO's proposal to vest its Board with discretion as to whether market power mitigation at the interties is implemented in the future. We also direct CAISO to make informational filings regarding the presence of structural market power, and to make a compliance filing within 30 days after the date of issuance of this order correcting erroneous cross-references, as discussed below.

217. CAISO proposes, for the most part, to extend its existing real-time local market power mitigation process to the EIM footprint. We note that the Commission has found CAISO's real-time local market power mitigation process to be just and reasonable³²⁷ and, with some modifications to enhance and improve it, this process has been in place since 2009.

218. However, CAISO proposes to determine whether real-time local market power mitigation on EIM interties is appropriate at an unspecified future time and, if found by CAISO's Board to be warranted, implement market power mitigation on EIM interties for PacifiCorp's BAAs. Intervenors argue that the determination regarding market power

³²⁴ PacifiCorp Answer at 26-27.

³²⁵ CAISO Answer at 75-76.

³²⁶ *Id.* at 76.

³²⁷ *See Cal. Indep. Sys. Operator Corp.*, 116 FERC ¶ 61,274 (2006).

mitigation on EIM interties should be subject to Commission review and approval. We agree. Real-time local market power mitigation on EIM interties affects clearing prices in the EIM and whether or not such mitigation is implemented should be subject to Commission review and approval. Therefore, we direct CAISO to make a compliance filing within 30 days after the date of issuance of this order that makes real-time local market power mitigation on EIM interties subject to filing with, and acceptance by, the Commission.

219. We decline, however, to require real-time local market power mitigation on EIM interties at EIM start-up, as some intervenors have requested. First, CAISO has not proposed, and we are not persuaded, that market power mitigation on EIM interties is warranted on EIM start-up. Second, PacifiCorp currently has market-based rate authority, which includes authorization to sell energy and ancillary services at market-based rates within its two BAAs.³²⁸ Therefore, implementing real-time local market power mitigation on EIM interties for PacifiCorp's BAAs at EIM start-up could result in unnecessary mitigation. However, while we will not require real-time local market power mitigation on EIM interties at start-up, to help identify any potential for exercise of market power, we take the following two steps. First, in the order issued contemporaneously with this order in Docket No. ER14-1578-000, we are directing PacifiCorp to make a market-based rate change of status filing within nine months of the launch of the EIM so that the Commission can assess whether PacifiCorp has structural market power in its BAAs under the EIM structure. Second, in order that the Commission may monitor for the existence of market power at the interties during the pendency of PacifiCorp making a change of status filing and the Commission's review of that filing, we direct CAISO to provide the Commission with informational status reports every six months for two years following the launch of the EIM on the presence of structural market power in PacifiCorp's BAAs due to limits on transmission interties into and between these BAAs under the EIM structure.³²⁹ The Commission will use the information in these reports to determine if any action is necessary to address structural market power in PacifiCorp's BAAs under the EIM structure.

220. In addition, CAISO may file with the Commission to implement real-time local market power mitigation on EIM interties if it believes, and can demonstrate, that such mitigation is warranted after the Department of Market Monitoring completes its

³²⁸ See *PacifiCorp*, Docket No. ER97-2801-030, *et al.*, (June 29, 2011) (unpublished letter order accepting updated market power analysis and notice of change in status).

³²⁹ These informational filings are for informational purposes only and will not be noticed, nor require Commission action.

assessment of structural market power in PacifiCorp's BAAs. In that regard, CAISO may propose additional tariff detail regarding its proposed structural market power analysis and how decisions regarding activation/deactivation of market power mitigation on EIM interties will be made. The Commission will evaluate the extent to which the rules regarding real-time local market power mitigation on EIM interties are objective and clearly set forth in the tariff and, based on that, decide whether future determinations regarding market power mitigation on EIM interties should be filed with the Commission.

221. We reject Powerex's argument that real-time local market power mitigation at EIM interties could lead to over-mitigation because all resources within an EIM Entity BAA would be subject to mitigation. First, with real-time local market power mitigation on EIM interties, resource bids will only be mitigated when an EIM intertie is congested and if the intertie is deemed non-competitive. When a non-competitive transmission path is congested, potential for market power exists for all resources that provide counter-flow to the congestion. Second, only bids that exceed a resource's default energy bid will be mitigated to the default energy bid level. A default energy bid represents a resource's marginal cost. Therefore, even if mitigated, a resource's mitigated bid approximates what it would have bid under competitive conditions. Powerex essentially argues that not all resources' bids within a transmission constrained area should be mitigated when there is potential for market power. This, however, is a feature of CAISO's existing local market power mitigation design, which the Commission has previously found to be just and reasonable. Powerex has not presented any evidence to persuade us otherwise.

222. We disagree with Powerex that CAISO's market rules should not necessarily be extended to the EIM as there may be superior market design alternatives. The Commission need only decide whether CAISO's proposal to extend its real-time market design to the EIM is just and reasonable, and, with the modification directed herein, we find that it is. CAISO does not need to demonstrate that its proposal is the *most* just and reasonable approach, and the Commission need not consider whether alternative proposals are superior.³³⁰

223. We reject Six Cities' argument that a resource in one EIM Entity BAA may have market power in relation to a transmission constraint in another EIM Entity BAA and should be mitigated regardless of the location of the constraint. Six Cities do not provide any explanation for this assertion, and we will not hypothesize where Six Cities' concerns lie.

³³⁰ See, e.g., *Cal. Indep. Sys. Operator Corp.*, 128 FERC ¶ 61,265, at P 21 (2009); *City of Bethany v. FERC*, 727 F.2d 1131, 1136 (D.C. Cir. 1984).

224. We do not share intervenors' concerns that CAISO's default energy bid calculation may be inaccurate because it does not properly account for the opportunity cost of resources in the West, especially hydroelectric resources. First, as CAISO points out, the EIM is an extension of CAISO's existing real-time market and the same rules should apply to both. Second, CAISO's tariff provides for three methods of default energy bid calculation, including a negotiated default energy bid option. Therefore, market participants have a great deal of flexibility in how their default energy bid is calculated and can choose an option that best reflects their resources' characteristics and constraints. Finally, EIM participation is voluntary and an EIM Participating Resource has a great deal of flexibility in determining how much of its resource's capacity it is willing to offer into the EIM. Therefore, we dismiss the arguments to reject CAISO's proposal or adopt alternatives.

225. Neither are we convinced by PacifiCorp's argument that the variable cost option default energy bid must include a transmission charge element. As CAISO points out, PacifiCorp can avail itself of the negotiated default energy bid option if it believes the variable cost option does not adequately capture all variable costs of its resources.

226. With regard to Neighboring Systems' request that market power analyses be performed on an ongoing basis and that the Department of Market Monitoring publish quarterly reports on the performance of the EIM, we note that CAISO has proposed that the Department of Market Monitoring will monitor markets administered by CAISO, which include the EIM.³³¹ In addition, CAISO's tariff requires the Department of Market Monitoring to report on wholesale market trends on a quarterly basis.³³² Therefore, we find that Neighboring Systems' concerns are adequately addressed under CAISO's proposal.

227. Finally, with respect to the references to a nonexistent tariff section identified by BPA, Six Cities, and Powerex, we note that CAISO has explained that the missing section was moved and offers to correct the erroneous cross-references to the missing section in proposed section 29.39(c) on compliance. Accordingly, we direct CAISO to make the correction in a compliance filing within 30 days after the date of issuance of this order.

³³¹ See CAISO Tariff, proposed section 29.38.

³³² *Id.*, Appendix P, section 5.2.

5. Greenhouse Gas Regulation

Background

228. Proposed section 29.32 of CAISO's tariff describes the market rules governing how resources can address compliance with California's GHG regulations. The proposed market rules recognize that EIM Participating Resources may incur costs to comply with CARB GHG regulations if their resources are deemed to have been imported into the CAISO BAA or other BAAs in California. The proposal permits each EIM Participating Resource to submit a separate bid component to cover such costs. CAISO states that it will take these bid components into account when selecting energy produced by EIM Participating Resources for imports into the CAISO BAA or other BAAs in California, and in calculating LMPs.³³³

229. CAISO proposes to apply its \$1,000/MWh energy bid cap to the sum of the energy portion of a bid and the portion associated with GHG compliance costs. According to CAISO, this is the same approach it applies currently to bids in its real-time market. CAISO asserts that it is not necessary to establish separate caps for each bid component.

230. According to CAISO, EIM Participating Resources that prefer not to be dispatched to serve demand in California but still be available to deliver supply in the EIM Entity BAA are able to do so by submitting a high GHG compliance bid adder and an economic energy bid component.³³⁴ CAISO asserts that, although it is theoretically possible that it could dispatch a resource with a high bid adder and low energy bid component to serve CAISO demand if energy costs in CAISO were sufficiently high to dispatch similarly priced resources, that outcome is unlikely. CAISO contends that it probably would have already dispatched the resource to serve non-CAISO demand because: (1) only the low energy bid component would have been considered for that purpose; and (2) the proximity to load would minimize congestion and losses.

231. CAISO concludes that there is no justification for the cost of compliance with CARB regulations to be excluded from the LMP of energy exported from CAISO. According to CAISO, GHG compliance is a legitimate cost of generators in California. CAISO asserts that there is no basis for reducing the clearing price to deny those generators the ability to reflect this cost element in their bids. Finally, to address the concern that the bid adder mechanism would allow non-cost based strategic bidding and

³³³ CAISO Transmittal Letter at 25-27.

³³⁴ *Id.* at 26.

price discrimination toward California, CAISO's proposal provides that resources may submit only a daily adder, rather than an hourly adder.³³⁵

232. While requesting that the Commission approve its proposed GHG bid adder as filed, CAISO states that it has undertaken a stakeholder initiative regarding a potential design enhancement that would allow a resource to select a flag to prevent it from being dispatched to meet CAISO load.³³⁶ In a memorandum attached to the transmittal letter, CAISO's Department of Market Monitoring notes that a flag feature "could be an important mechanism to encourage participation by some suppliers in [the] EIM, especially if [the] EIM becomes a broader regional imbalance market," and expresses support for consideration of this alternative as the EIM expands into other BAAs.³³⁷

Comments

233. Although a number of commenters express their support,³³⁸ others raise concerns with CAISO's proposal. In particular, parties voice concern regarding the potential for adverse market outcomes from GHG adder bidding that could result in market gains going more to external than internal resources. SoCal Edison argues that an unrestricted bid adder could be used to capture EIM benefits that otherwise would have gone to internal CAISO market participants.³³⁹ Powerex witness William W. Hogan argues that the GHG bid adder could be used to manipulate LMPs and GHG allowance prices and that, as is, the proposal would work only in a perfectly competitive equilibrium.³⁴⁰

234. Six Cities maintain that CAISO's bid adder proposal could result in an over-recovery of costs by some market participants, as resources that do not incur compliance costs could still use the bid adder.³⁴¹ To address these concerns, both Six Cities and

³³⁵ *Id.* at 26-27.

³³⁶ *Id.* at 26.

³³⁷ *Id.*, Attachment G, Memorandum to CAISO's Board of Governors from Eric Hildebrandt, Director, Department of Market Monitoring at 4-5.

³³⁸ NRDC Comments at 1; CARB Comments at 1-2; PacifiCorp Comments at 12.

³³⁹ SoCal Edison Comments at 4-8.

³⁴⁰ Powerex Protest, Attachment B at 1-5.

³⁴¹ Six Cities Comments at 10.

SoCal Edison argue for a bid adder cap corresponding to 150 percent of some measure of compliance costs.

235. Additionally, parties question whether the GHG bid adder is an effective tool to isolate market participants from CARB regulations. Seattle and Tri-State argue that the GHG bid adder is not an effective tool for market resources to avoid selling into California because they would be dispatched to serve load in California if prices reached the bid cap.³⁴² Chelan PUD and Powerex are concerned that CAISO will notify market participants about their CARB obligation after-the-fact or as part of the dispatch instruction.³⁴³ Chelan PUD and Portland General prefer a flag attached to a bid that indicates the bidder's unwillingness to export to California.³⁴⁴

236. Finally, part of the PacifiCorp West BAA is located in California and PacifiCorp notes that section 29.32 sets forth provisions affecting energy that is deemed to be imported into "the CAISO [BAA] or other EIM Entity [BAAs] in California." PacifiCorp requests clarification that it will not be considered an EIM Entity BAA in California and, therefore, it would not be subject to the GHG obligations applied to EIM Entity BAAs in California.³⁴⁵

Answer

237. In its answer, CAISO clarifies that section 29.32 does not apply to PacifiCorp's California service territory as CAISO states that PacifiCorp is not deemed to be located in California, even if a small portion of its BAA is located in California.³⁴⁶

Commission Determination

238. We conditionally accept CAISO's proposal regarding the GHG bid adder, subject to CAISO submitting a compliance filing within one year after commencement of the EIM, as discussed below. We find that the GHG bid adder will provide a reasonable avenue both for EIM Participating Resources to signal that they do not wish to be

³⁴² Seattle Comments at 5-6; Tri-State Comments at 1-4.

³⁴³ Chelan PUD Comments at 2-4.

³⁴⁴ *Id.*; Portland General Comments at 9-10.

³⁴⁵ PacifiCorp Comments at 12 (quoting CAISO Tariff, proposed section 29.32(b)).

³⁴⁶ CAISO Answer at 33-34.

dispatched into California, and for EIM Participating Resources that are dispatched into California to recover the additional GHG compliance costs of such dispatch during the initial operation of the EIM.

239. We note that the fact that CAISO's proposal allows the bid adder to be submitted only once a day, rather than hourly, should lessen stakeholder concerns about bidding behaviors. Further, as pointed out by CAISO's Department of Market Monitoring, commenters' concerns regarding possible abuse of the GHG bid adder should be limited by competition among resources bidding into California.³⁴⁷ In other words, bids with high GHG adders will not be dispatched for sales into California unless the total bid price (energy plus GHG adders) is less than the marginal price for energy in the CAISO system. Such competition should also lessen concerns regarding over-recovery of GHG compliance costs. Additionally, any remaining concerns of over-recovery of GHG compliance costs, if and when the EIM expands beyond the initial participants, will be addressed by the cost-based GHG bid adder mechanism required below. For these reasons, we find that CAISO's proposed use of the GHG bid adder will provide an appropriate level of protection during the initial year of operation of the EIM.

240. However, we understand commenters' concerns that resources using the GHG bid adder as a signal that they do not wish to be dispatched for sales into California could still be dispatched to serve load into CAISO if prices reach the maximum \$1,000/MWh energy bid cap. While this outcome is unlikely, and a resource seeking absolute assurance that it not be dispatched in California has the option not to participate in the EIM, we are concerned that this issue might deter market participation as the EIM expands. We appreciate CAISO's commitment to continue working with the Department of Market Monitoring and its stakeholders toward the development of a bid flag that could be used to preclude a resource from being dispatched to serve CAISO load. Such a mechanism would permit greater participation in the non-California portion of the EIM. Therefore, we require CAISO to make a compliance filing within one year after the date on which the EIM commences operation, with a proposal to implement the flag mechanism. Additionally, as the flag mechanism will obviate the need to use the GHG bid adder to signify that an EIM Participating Resource does not wish to be dispatched into California, such compliance filing should include revisions implementing a cost-based GHG bidder concurrent with implementation of the flag mechanism. A flag and cost-based GHG bid adder would support further expansion of the EIM.

³⁴⁷ CAISO Transmittal Letter, Attachment G, Memorandum to CAISO's Board of Governors from Eric Hildebrandt, Director, Department of Market Monitoring, at 5.

6. Seams Issues

a. Impacts on Non-Participants

Background

241. Under the EIM proposal, CAISO will dispatch transfers between EIM Entity BAAs using transmission rights specifically made available for that purpose. According to CAISO, these EIM transfers will not use the rights of non-participants.³⁴⁸ CAISO states that its market model and congestion management tools prevent such use of transmission rights of non-participants. CAISO affirms that it remains committed to working with non-participants and adjacent and intermediary balancing authorities to ensure coordination and communication procedures and implement additional controls as needed. CAISO states that it has entered into a memorandum of understanding with PacifiCorp and BPA to ensure that transfers between PacifiCorp's BAAs and CAISO's BAA are managed appropriately, based upon transmission rights set aside for that purpose.³⁴⁹

Comments

242. While Six Cities appreciate that, as the EIM design has evolved, CAISO has included measures that will tend to protect non-participants from potential adverse impacts, Six Cities remain concerned that the EIM design: (1) may not provide sufficient protection against expanded accumulation of excessive uplift costs nor fairly allocate or distribute such uplift costs; (2) does not ensure acceptable symmetry of capacity obligations between the CAISO footprint and non-CAISO participants and may not fairly align responsibility for EIM costs with EIM benefits; (3) may allow resources to over-recover for GHG costs; (4) may not adequately address potential market power; and (5) does not provide for consideration and fair and proper allocation of stranded costs if EIM participation is terminated.³⁵⁰ According to Six Cities, the full alignment of EIM costs with benefits should seek to achieve two objectives. First, the EIM should “do no harm” to non-participants—i.e., market participants in one BAA should not be forced to bear extra or incremental costs to produce benefits for the market participants in a different BAA. According to Six Cities, while the “do no harm” rule is a necessary element of the EIM design, it is not by itself sufficient to satisfy the cost causation

³⁴⁸ *Id.* at 11.

³⁴⁹ *Id.* at 11-12.

³⁵⁰ Six Cities Comments at 6-12.

principle.³⁵¹ Six Cities assert that the cost causation principle and fundamental fairness also require that participants in the different BAAs bear shares of overall EIM costs that are proportional to the shares of overall EIM benefits they receive.

243. To the extent the Commission approves PacifiCorp's EIM proposal, TANC asks the Commission to require PacifiCorp and/or CAISO either to provide assurances that EIM transfers will not adversely impact non-EIM participating transmission assets, such as the California-Oregon Intertie, or to take mitigation measures to address any such adverse impacts.³⁵² In particular, TANC asserts that CAISO and PacifiCorp have not provided sufficient assurances regarding the potential for changing usage patterns and the resultant effects on power flows and prices. TANC further asserts the Commission should ensure that appropriate studies are conducted prior to implementation of the EIM, that the EIM will not adversely impact non-EIM participating transmission assets that are integrated with PacifiCorp's transmission system and the transmission system under CAISO's control, and that the Commission should require CAISO and PacifiCorp to enter into mitigation agreements to address any such adverse impacts or take other measures to resolve those issues.³⁵³

244. Seattle asserts that non-participating resources and loads should not be affected by the EIM and that the Commission should establish some benchmarks to minimize or prevent adverse effects to parties in Western markets not participating in the EIM.³⁵⁴ Seattle is concerned that many provisions of CAISO's proposal will require non-participants to alter their actions and incur costs. Seattle asserts that the Commission should ensure that these changes are necessary for EIM operations and are in the interest of the non-participants.³⁵⁵

³⁵¹ *Id.* at 7.

³⁵² TANC Comments at 9-15, 19-21. Santa Clara, Redding, and Modesto each expressly agree with and adopt the comments submitted by TANC in this proceeding.

³⁵³ *Id.* at 10-15.

³⁵⁴ Seattle Comments at 3-4.

³⁵⁵ *Id.* at 5.

245. Neighboring Systems assert that, in the absence of appropriate clarifications and conditions, CAISO's EIM proposal may harm non-participants.³⁵⁶ Neighboring Systems request that the Commission: (1) establish a technical conference to discuss and resolve seams issues, including operational impacts on non-EIM participants; (2) require CAISO to perform power flow studies, to be shared with Neighboring Systems, before any new EIM participation agreement is executed or the amount of resources participating is increased significantly, and if any adverse impacts are projected in the power flow studies or occur in actual operation; and (3) direct CAISO, in coordination with the relevant EIM participant, to negotiate mitigation measures and/or compensation with the affected non-EIM participants.³⁵⁷

246. WAPA states that it supports the formation of a properly functioning energy imbalance market, but that the creation and operation of the EIM should not adversely impact other BAAs within the Western Interconnection that are not participating.³⁵⁸ SDG&E also supports the EIM proposal and asserts that the proposal is structured to allow market participants who do not wish to participate in the centralized real-time market to avoid doing so.³⁵⁹

Answers

247. PacifiCorp explains that the proposal regarding EIM transfers was particularly designed to respect the rights of transmission owners or customers over interchange facilities between the PacifiCorp East and PacifiCorp West BAAs or between PacifiCorp West and the CAISO BAA.³⁶⁰

248. CAISO asserts that non-participants' concerns that EIM implementation will adversely impact their systems are unfounded. CAISO argues that the EIM does not include any right or obligation that would change the manner in which intertie transactions are handled, will not use the rights of any rights holder on the California-Oregon Intertie or elsewhere, and will use only capacity made available by CAISO's participating transmission owners or by EIM transmission service providers as a dynamic

³⁵⁶ Neighboring Systems Comments at 6.

³⁵⁷ *Id.* at 11, 21.

³⁵⁸ WAPA Comments at 3.

³⁵⁹ SDG&E Comments at 5.

³⁶⁰ PacifiCorp Answer at 29-30.

schedule that will not have any impact on current flows. CAISO asserts that the only difference between its current operations and the EIM is that the EIM will ensure that the most efficient resources are used to serve load, recognizing the transmission constraints, and based on available EIM transfer limits.³⁶¹

249. CAISO reiterates that it has entered into a memorandum of understanding with PacifiCorp and BPA to ensure that transfers between the PacifiCorp BAAs and CAISO, using transmission rights on BPA's system made available for that purpose, are managed appropriately. CAISO believes that this agreement should suffice to address commenters' concerns. CAISO also points out that BPA, the owner of the rights in question, has not included this issue in its protest.³⁶²

Commission Determination

250. We find that CAISO has taken sufficient steps to ensure that EIM transfers between EIM Entity BAAs and CAISO will not adversely impact non-participant systems and so accept CAISO's proposal. In particular, the memorandum of understanding with PacifiCorp and BPA, planned market simulation, and proposed normal and emergency operations procedures should help to preclude adverse impacts to non-participants. We expect CAISO will continue to work with adjacent and neighboring non-participating balancing authorities to ensure appropriate coordination and communication procedures, and to implement any necessary additional controls if unforeseen issues arise.

b. Preserving Transmission Rights

Background

251. In its proposal, CAISO explains that the EIM will dispatch transfers between participating BAAs using transmission rights specifically made available for that purpose.³⁶³

³⁶¹ CAISO Answer at 9.

³⁶² *Id.* at 10.

³⁶³ CAISO Transmittal Letter at 11-12.

Comments

252. Wind Parties assert that CAISO's proposal fairly recognizes transmission rights.³⁶⁴ Iberdrola states that the market design fairly recognizes the transmission rights of entities transacting within CAISO and the EIM Entities without undue harm or diminution of these existing transmission rights.³⁶⁵

253. Portland General contends that the increased flows and usage of dynamic transfer capability³⁶⁶ must be evaluated thoroughly before any northwest BAA joins the EIM.³⁶⁷ Portland General and Seattle request that the Commission ensure that dynamic transfer capability is awarded in a non-discriminatory and transparent manner.³⁶⁸ Portland General further contends that the impact of dynamic transfer capability allocation on the California-Oregon Intertie and of how EIM transfers will be monitored and scheduled in the EIM may not yet be fully understood.³⁶⁹ Portland General also expresses concern about the potential for increased congestion and curtailment issues on BPA's system given the EIM go-live date of October 1, 2014, and the implementation of BPA's 15-minute scheduling, scheduled for the latter part of 2014.³⁷⁰ Portland General requests that the Commission assess CAISO's proposal with these concerns in mind and consider requiring CAISO to demonstrate that affected stakeholders have a procedural mechanism to rapidly resolve disputes or, if necessary, rapidly request Commission action in the event the EIM has any detrimental reliability impact once implemented.³⁷¹

³⁶⁴ Wind Parties Comments at 7.

³⁶⁵ Iberdrola Comments at 4.

³⁶⁶ Portland General explains that BPA uses a dynamic transfer capability process to accommodate continuous ramping of a resource over the BPA transmission system on a pre-determined range, such that the control of the electrical output of such resources can be varied from moment to moment. Portland General Comments at 5.

³⁶⁷ *Id.*

³⁶⁸ *Id.*

³⁶⁹ *Id.*

³⁷⁰ *Id.* at 6.

³⁷¹ *Id.*

254. Seattle asserts that the Commission should establish some benchmarks to minimize or prevent adverse effects to parties in Western markets not participating in the EIM.³⁷² Seattle contends that PacifiCorp's participation in the EIM requires the use of dynamic transfers on BPA's transmission network and the California-Oregon Intertie. Seattle argues that before starting the EIM, CAISO should be absolutely certain that CAISO and PacifiCorp's use of the limited dynamic transfer capability does not encroach on the rights of other users of BPA's dynamic transfer capability. Seattle notes that BPA's study of the effects of increased dynamic transfers on the California-Oregon Intertie is still underway. Further, Seattle asserts that the Commission should ensure that dynamically connecting two large BAAs over a nine percent share of a single intertie can proceed without jeopardizing reliable service in the region. Seattle contends that MidAmerican Holdings Company's recent merger with NV Energy, Inc. creates new connections between PacifiCorp and Nevada Power Company that also require study.³⁷³

255. TANC asserts that any order approving the EIM must explicitly state that EIM transfers will be made only from rights that are subject to CAISO's operational control and will not reduce TANC's allocated share of the Available Transfer Capability on the California-Oregon Intertie, including those that occur in the event of a curtailment.³⁷⁴ TANC requests that the Commission confirm that under a certain curtailment scenario illustrated in its transmittal, an EIM transfer would occur only if CAISO had a sufficient unscheduled allocation of Available Transfer Capability available after the curtailment to accommodate it.³⁷⁵ TANC is concerned that CAISO will not take its contractual responsibilities seriously without Commission direction.³⁷⁶ Finally, TANC asserts that impacts of the EIM on non-participating integrated systems could increase dramatically as new EIM Entities join the EIM, and that studies would need to be conducted as each new EIM Entity joins.³⁷⁷ TANC requests that the Commission condition approval of the

³⁷² Seattle Comments at 3.

³⁷³ *Id.* at 4.

³⁷⁴ TANC Comments at 14.

³⁷⁵ *Id.* at 15.

³⁷⁶ *Id.*

³⁷⁷ *Id.* at 17.

EIM on CAISO's performance of pre-implementation testing and a demonstration that the EIM will not adversely impact non-EIM participating transmission assets.³⁷⁸

256. CMUA is concerned that operation of the EIM may degrade CMUA's scheduling rights to use transmission outside of the EIM footprint, and asserts that the EIM must work in harmony with WECC's Unscheduled Flow Mitigation Plan.³⁷⁹ CMUA asserts that the Commission should require CAISO, as part of its testing, to examine and report on flow changes across relevant interties as a consequence of EIM operations. If adverse impacts are identified, CMUA asserts that a dialogue to examine solutions must ensue before start-up.³⁸⁰

Answers

257. In its response, CAISO asserts that the EIM does not include any right or obligation that would change the manner in which intertie transactions are handled and that EIM transfers across the California-Oregon Intertie will use PacifiCorp's rights, which are made available for such purposes, capacity that is currently under CAISO's operational control, or any other rights and capacity specifically made available to the EIM by EIM transmission service providers.³⁸¹ CAISO also stresses that WECC's Unscheduled Flow Mitigation Plan will apply to EIM transfers between each of the three participating BAAs in the same manner as the Unscheduled Flow Mitigation Plan currently applies to dynamic schedules and to generation at locations within a BAA. CAISO also points out that BPA has expressed concerns regarding dynamic transfers across the California-Oregon Intertie and has established dynamic transfer capability limits which are allocated according to its business practices. CAISO asserts it "does not enforce such limits at this time."³⁸² Regarding Portland General's request for the Commission to require CAISO to establish a procedural process to resolve disputes, CAISO states that its memorandum of understanding with PacifiCorp and BPA should suffice to address Portland General's concerns.

³⁷⁸ *Id.* at 14.

³⁷⁹ CMUA Comments at 7.

³⁸⁰ *Id.* at 8.

³⁸¹ CAISO Answer at 11.

³⁸² *Id.* at 9 n.21.

258. PacifiCorp states that, to the extent that Portland General is requesting the Commission to direct that any action be taken with regard to BPA's transmission system, the BPA stakeholder process is the more appropriate forum for addressing such issues and any such request and attendant issues raised should be rejected in this proceeding.³⁸³ PacifiCorp asserts that the transmission rights made available for EIM transfers will never exceed PacifiCorp's transmission rights and that the PacifiCorp proposed EIM OATT provisions confirm this fact. PacifiCorp further asserts that the EIM does not present a departure from the current reliable operation of the systems and will not adversely impact the reliability of neighboring systems. PacifiCorp states that this conclusion is consistent with the Commission's prior determinations in response to similar concerns upon the implementation of CAISO's Market Redesign and Technology Upgrade (MRTU) proposal.

Commission Determination

259. While a number of parties raise concerns regarding the potential adverse impact of the EIM on dynamic transfer capability on BPA's transmission system and the California-Oregon Intertie, we note CAISO's comment that it does not enforce dynamic transfer capability limits at this time. We are satisfied that these matters will be appropriately addressed in the framework created by the memorandum of understanding between BPA, CAISO, and PacifiCorp.

260. While we do not believe that Seattle has provided sufficient support for its concern that dynamically connecting two large BAAs over a nine percent share of a single intertie may jeopardize reliable service in the region, we expect that this matter will nevertheless be reviewed jointly by CAISO, PacifiCorp, and the reliability coordinator (Peak Reliability).

261. We reject intervenors' concerns and assertions regarding preferential treatment of EIM transfers and potential encroachment on non-participating transmission rights. CAISO and PacifiCorp have confirmed that the EIM will use only the capacity made available by CAISO's participating transmission owners or by EIM transmission service providers as a dynamic schedule and will not impact current flows. Hence, we deny TANC's request to state explicitly that EIM transfers will only be made from transmission rights that are subject to the CAISO's operational control. CAISO's answer has provided sufficient assurances in this regard. Furthermore, CAISO has clarified that WECC's Unscheduled Flow Mitigation Plan will apply to EIM transfers between each of the three participating BAAs in the same manner as it currently applies to dynamic schedules and to generation at locations within a BAA.

³⁸³ PacifiCorp Answer at 12.

262. We also reject intervenors' assertions regarding a potential increase in congestion and curtailments in non-participating BAAs and transmission systems due to the EIM and their request that the Commission condition approval of the EIM on pre-implementation testing and studies to benchmark the EIM's potential adverse impacts on non-participants, or that CAISO enter into mitigation agreements or other measures to resolve any such adverse impacts that may arise. Intervenors have not provided sufficient support for these assertions and if any adverse impacts arise, the commenters can raise these matters through already available Commission processes. Our decision in this regard is consistent with the Commission's prior determinations in response to similar concerns with CAISO's MRTU proposal.

c. Unscheduled Flows

Background

263. Ordinarily, CAISO manages congestion through its real-time market. However, certain circumstances, e.g., when there is limited transfer capacity available to the market, may limit CAISO's ability to fully manage congestion throughout the EIM area. In such circumstances, CAISO will inform the balancing authorities in whose areas it is unable to resolve congestion. Additionally, CAISO or other BAAs within the EIM area may invoke WECC's Unscheduled Flow Mitigation Plan to resolve congestion. If the Unscheduled Flow Mitigation Plan is invoked, the balancing authority must adjust its schedules accordingly and inform CAISO so that the affected schedules can be incorporated in the real-time market.³⁸⁴

Comments

264. Several intervenors express concern that EIM operations will exacerbate unscheduled flow curtailments in the Western Interconnection and question how WECC's Unscheduled Flow Mitigation Plan will work in conjunction with the EIM.³⁸⁵ They suggest that CAISO should perform testing and studies (including power flow analysis) to determine the impact of the EIM on unscheduled flows and should address any adverse impacts prior to implementation.³⁸⁶ TANC argues that CAISO contradicts

³⁸⁴ CAISO Transmittal Letter at 19; CAISO Tariff, proposed section 29.7(k).

³⁸⁵ Tri-State Comments at 5; Redding Comments at 10; TANC Comments at 17; Neighboring Systems Comments at 10.

³⁸⁶ CMUA Comments at 8; Redding Comments at 11; TANC Comments at 18; Neighboring Systems Comments at 11.

itself when it claims that CAISO or an EIM Entity may initiate WECC unscheduled flow procedures where appropriate, but also claims the EIM is not intended to resolve issues associated with unscheduled flows.³⁸⁷

265. As a facility owner of the California-Oregon Intertie, Portland General raises concerns that the impacts on the California-Oregon Intertie of how EIM transfers will be monitored and scheduled in the EIM may not yet be fully understood.³⁸⁸ Portland General asserts that, when transmission curtailments occur on BPA's transmission system due to congestion on the California-Oregon Intertie, NERC curtailment priorities must be honored and CAISO EIM flows should not receive preferential treatment, particularly when the curtailment occurs prior to the scheduling hour. Once inside the hour, Portland General asserts that firm transmission holders not participating in the EIM who have been curtailed should not be further disadvantaged as transmission limits are reloaded by the granting of EIM intra-hour flows while those non-EIM (hourly) participants are denied.

Answers

266. In its answer, PacifiCorp argues that intervenors' concerns about the adverse impact of the EIM on unscheduled flows in the Western Interconnection are unsupported.³⁸⁹ PacifiCorp asserts that it will remain responsible under the EIM for real-time flow management and mitigation constraints in accordance with WECC's Unscheduled Flow Mitigation Plan, and that all interchange between PacifiCorp East, PacifiCorp West, and other BAAs will continue to be scheduled and subject to operational curtailments consistent with WECC's Unscheduled Flow Mitigation Plan. PacifiCorp further asserts that its method of populating dynamic e-Tags with an estimated amount of energy for the energy profile of the e-Tag for EIM transfers is compatible with WECC's Unscheduled Flow Mitigation Plan. PacifiCorp acknowledges that there may be issues with WECC's Unscheduled Flow Mitigation Plan relating to dynamic e-Tags, but asserts that those issues are not a product of EIM implementation and are therefore beyond the scope of this proceeding.

267. Like PacifiCorp, CAISO states that WECC's unscheduled flow procedures will apply to EIM transfers between each of the three participating BAAs in the same manner as they currently apply to dynamic schedules and to generation at locations within a

³⁸⁷ TANC Comments at 18.

³⁸⁸ Portland General Comments at 5-6.

³⁸⁹ PacifiCorp Answer at 9-10.

BAA.³⁹⁰ CAISO also points out that there is no reason why EIM transactions that do not cross a BAA boundary should have any different impact on unscheduled flows than current transactions. CAISO asserts that any questions in connection with the treatment of unscheduled flow procedures relate to WECC procedures and tools, not the EIM filing. In addition, CAISO notes the EIM does not alter e-Tagging requirements of participating BAs, including PacifiCorp.

Commission Determination

268. We are satisfied that CAISO's proposal will not subject non-participants to unreasonable increases in unscheduled flows. As an initial matter, issues concerning the curtailment priorities and e-Tagging procedures contained in WECC's Unscheduled Flow Mitigation Plan are outside the scope of the proposal before us.³⁹¹ We also find no contradiction in the fact that CAISO and other balancing authorities in the EIM area may initiate WECC's Unscheduled Flow Mitigation Plan when appropriate. We believe that CAISO's planned market simulation should help in identifying any potential problems and providing any corrective actions prior to implementation of the EIM. Regarding Portland General's concerns, we expect that the WECC Unscheduled Flow Mitigation Plan will be utilized in mitigating constraints on the California-Oregon Intertie according to the curtailment priorities and periods set forth therein. Finally, with regard to concerns that unscheduled flow impacts from the EIM will be forced upon non-participating integrated transmission systems, and that such unscheduled flow impacts could increase as new EIM Entities join the EIM, we note that changes to market operations may indeed result in changes to flows on the integrated transmission system. This, however, is not reason to prevent improvements to market operations that will result in increased efficiencies and benefits to customers.

³⁹⁰ CAISO Answer at 11.

³⁹¹ The revised WECC Unscheduled Flow Mitigation Plan, designated by PacifiCorp as First Revised Rate Schedule No. 439, was accepted by the Commission on May 19, 2014 in Docket No. ER14-778-000. *PacifiCorp*, 147 FERC ¶ 61,131 (2014).

7. Other Issues

a. Congestion Offset Costs

Background

269. Proposed section 11.5.4.1.1(d) of CAISO's tariff states that CAISO will allocate the real-time congestion offset for each EIM Entity BAA to the applicable EIM Entity Scheduling Coordinator.³⁹²

Comments

270. PG&E explains that to the extent the collective base schedules, submitted prior to the real-time market runs, do not satisfy all transmission constraints, the EIM will try to remove the resulting violations, and as a result uplifts may occur.³⁹³ PG&E asserts that the proposed EIM design will allocate any real-time congestion offset costs that result from infeasible forward schedules (i.e., those not deliverable in real time due to transmission constraints) back to the BAA where the transmission constraint resides. However, PG&E states when a transmission constraint is physically outside of the EIM Entity BAA, but is still being modeled by the EIM and managed by CAISO, it can result in real-time congestion offset charges. PG&E states that the tariff language is not clear and recommends that any real-time congestion offset charges that may arise from managing such transmission constraints for transmission rights on an external BAA that are held and scheduled by an EIM Entity be treated the same as if the constraints were transmission constraints in the BAA of the EIM Entity that holds and schedules the rights.³⁹⁴

Answer

271. In its answer, CAISO explains that it intended the proposed tariff amendments to address PG&E's concern. CAISO states that it will treat real-time congestion offset charges under these circumstances as if they were located within the applicable EIM Entity BAA and does not believe any changes to the tariff are necessary.³⁹⁵ However, CAISO states that it is willing to include additional clarification on compliance.

³⁹² CAISO Tariff, proposed section 11.5.4.1.1(d).

³⁹³ PG&E Comments at 3-4.

³⁹⁴ *Id.* at 4-5.

³⁹⁵ CAISO Answer at 47.

Commission Determination

272. We agree with PG&E that proposed section 11.5.4.1.1(d) is unclear and accordingly, we direct CAISO to submit, within 30 days after the date of issuance of this order, a further compliance filing that makes clear that any real-time congestion offset charges that may arise from managing transmission constraints for transmission rights on an external BAA that are held and scheduled by an EIM Entity must be treated the same as if the constraints were transmission constraints in the BAA of the EIM Entity that holds and schedules the rights.

b. Issues in Specific Tariff Provisions

273. Powerex and other intervenors raise issues with respect to multiple tariff revisions which they argue should be revised. These arguments are addressed separately below.

Comments

274. Powerex argues that it is unclear from the proposed tariff what process CAISO plans to use to set administrative prices in the EIM in case of an EIM market disruption. Powerex further asserts that CAISO started a stakeholder process to address administrative pricing issues, but that process was not completed.³⁹⁶

Answer

275. CAISO responds that the methodology is set forth in section 7.7.4 of its existing tariff and proposed section 29.7(j)(2)(d) references this existing provision.³⁹⁷ However, CAISO states that it is willing to provide another cross-reference, as requested by Powerex, if the Commission finds it appropriate to do so.

Commission Determination

276. We will not direct CAISO to provide an additional cross-reference. We are not persuaded by Powerex's argument. The proposed tariff provisions set forth the conditions under which CAISO may declare an interruption of EIM Entity participation in the real-time market and the actions CAISO may take in response to such disruption.³⁹⁸ Among the actions CAISO may take is setting an administrative price in accordance with

³⁹⁶ Powerex Protest at 91-92.

³⁹⁷ CAISO Answer at 12.

³⁹⁸ See CAISO Tariff, proposed sections 29.7(j)(1) and (2).

the provisions of its existing tariff.³⁹⁹ The Commission has found these provisions to be just and reasonable and Powerex has not demonstrated otherwise. While we encourage CAISO and its stakeholders to further collaborate to clarify market disruption procedures, we find CAISO's proposal to use existing procedures for EIM market disruptions to be just and reasonable.

Comments

277. Proposed section 29.26(b) of CAISO's tariff provides, in relevant part, that "[t]he determination and charges for transmission service for Real-Time Market transactions on the facilities that are part of the contractual or ownership rights made available to the Real-Time Market by an EIM Transmission Service Provider through an EIM Entity will be the responsibility of the EIM Entity that made the facilities available, *except that the EIM Entity shall ensure that no EIM Transmission Service Provider imposes a separate charge for EIM Transfers that use its facilities.*"⁴⁰⁰ Powerex contends that this provision improperly attempts to restrict charges that may be assessed by a transmission provider outside of CAISO and should be stricken as beyond the reach of CAISO's tariff.⁴⁰¹

Commission Determination

278. We find that the proposed language purporting to require an EIM Entity to ensure that there is no charge imposed for transmission service by a third party for EIM transfers is vague and serves no valid purpose. First, it is not clear how an EIM Entity would ensure that a third party transmission provider does not propose to impose a transmission service charge for EIM transfers on the facilities that are part of the contractual or ownership rights of the EIM Entity. Second, to the extent that such a charge is imposed, the proposed language provides that the EIM Entity will be responsible for such a charge. Therefore, it does not appear necessary for the EIM Entity to ensure there are no separate charges for EIM transfers that use non-CAISO facilities. Accordingly, we direct CAISO to submit a compliance filing within 30 days after the date of issuance of this order

³⁹⁹ See *id.*, section 29.7(j)(2)(D). The proposed tariff provision cross-references section 7.7.4 (Intervention in CAISO Market Operations) and section 7.7.15 (System Operations In The Event Of A Market Disruption). Section 7.7.4(3) provides that the administrative price in relation to each of the markets for imbalance energy and ancillary services shall be set at the applicable price in the settlement period immediately preceding the settlement period in which the intervention took place.

⁴⁰⁰ *Id.*, proposed section 29.26(b) (emphasis added).

⁴⁰¹ Powerex Protest at 92-93.

deleting the language “except that the EIM Entity shall ensure that no EIM Transmission Service Provider imposes a separate charge for EIM Transfers that use its facilities” from section 29.26(b) of its tariff.

Comments

279. Powerex asserts that proposed sections 29.32(d) and (f) of CAISO’s tariff may be in conflict with each other, because section 29.32(d) indicates that the scheduling coordinator will be made aware of its dispatch instruction if its bid is deemed to be imported into CAISO, while section 29.32(f) indicates that the energy deemed to have been imported into CAISO will be published in conjunction with real-time market results.⁴⁰²

Answer

280. In its answer, CAISO clarifies that section 29.32(d) explains that an EIM Participating Resource Scheduling Coordinator will receive a dispatch instruction for a resource dispatched to support an import into CAISO, while section 29.32(f) provides that the EIM Participating Resource Scheduling Coordinator will receive a market results report of the 15- and five-minute markets.⁴⁰³

Commission Determination

281. We agree with CAISO that there is not an inconsistency in the proposal. Per the explanation provided in its answer, CAISO proposes to notify the scheduling coordinator for an EIM Participating Resource of the portion of its output deemed to be imported to California once through the dispatch instruction and a second time through a market results report. We find this proposal to be reasonable, and the language in the proposed sections to be consistent with this proposal.

Comments

282. Powerex objects to proposed section 29.34(q) of CAISO’s tariff, which states that CAISO will treat variable energy resources in accordance with section 34 of its existing tariff.⁴⁰⁴ Powerex argues the reference is overly broad, redundant, and should be stricken because section 34 (Real-Time Market) is 43 pages long.

⁴⁰² *Id.* at 93.

⁴⁰³ CAISO Answer at 34.

⁴⁰⁴ Powerex Protest at 93-94.

Answer

283. CAISO submits that section 34 includes both provisions that apply exclusively to variable energy resources, as well as other provisions that apply to all resources, including variable energy resources, and contends that an attempt to identify every applicable provision to variable energy resources in the new section 29 for purposes of the EIM could result in the omission of relevant provisions.⁴⁰⁵

Commission Determination

284. We agree that incorporating the entirety of existing section 34 of CAISO's tariff by reference into proposed section 29.34(q) is too broad and unduly burdensome to customers. Section 29.34(q) relates to variable energy resource production forecast and provides only that CAISO shall treat variable energy resources in accordance with section 34. Accordingly, we direct CAISO to submit a compliance filing within 30 days after the date of issuance of this order clarifying section 29.34(q) to identify which provisions in section 34 will be applicable to variable energy resources participating in the EIM.

Comments

285. Powerex asserts that proposed section 29.34(i)(2) of CAISO's tariff is vague, as it provides that an EIM Participating Resource Scheduling Coordinator may bid a transaction at an EIM external intertie into the 15-minute market if both BAAs support 15-minute scheduling at the EIM external interties.⁴⁰⁶ Powerex argues that it is not clear which two BAAs are referenced in this provision and that, moreover, the relevant transmission provider or transmission path operator may not necessarily support 15-minute scheduling.

Answer

286. In response, CAISO explains that EIM external interties are defined as a point of interconnection between an EIM Entity BAA and an interconnected BAA other than a BAA in the EIM area.⁴⁰⁷ CAISO agrees with Powerex that while a balancing authority may adopt 15-minute scheduling, the relevant transmission provider or path operator may not, and offers to make this correction on compliance.

⁴⁰⁵ CAISO Answer at 41.

⁴⁰⁶ Powerex Protest at 94.

⁴⁰⁷ CAISO Answer at 41-42.

Commission Determination

287. We find that the reference to “both BAAs” in section 29.34(i)(2) is not vague or overly broad and thus hold that no clarification is required. However, as asserted by Powerex and acknowledged by CAISO, we find that for an EIM Participating Resource to bid in the 15-minute market, the relevant transmission provider and transmission path operator must also support 15-minute scheduling. Therefore, we direct CAISO to make a compliance filing within 30 days after the date of issuance of this order changing the reference to “15-minute economic participation,” as proposed in CAISO’s answer.

Comments

288. Powerex objects to the requirement in proposed section 29.10(e) that an EIM Entity Scheduling Coordinator with an EIM external intertie bid provide hourly transmission profiles and 15-minute energy profiles from respective e-Tags at least 20 minutes before the start of the operating hour.⁴⁰⁸ Powerex asserts that this requirement is inconsistent with the timeline of the 15-minute market, which provides results to market participants 22.5 minutes before the start of any 15-minute interval.

Answer

289. In its answer, CAISO contends that by 20 minutes prior to the operating hour, it will have completed the hourly 15-minute market and communicated the results such that an EIM Entity will know the hourly transmission profile and the best information on its 15-minute energy profile.⁴⁰⁹ CAISO asserts that this process is consistent with the process within CAISO, which recognizes WECC e-Tagging deadlines.

Commission Determination

290. We find merit in Powerex’s argument. An EIM Entity Scheduling Coordinator will know its transmission profile and best estimate of its 15-minute energy profiles 22.5 minutes before the start of the operating hour. However, to the extent that CAISO is proposing to use the energy profile of the e-Tags for settlement purposes, it is not clear why CAISO proposes to use the energy profile from the e-Tags submitted 20 minutes before the operating hour, rather than the updated energy profile from the e-Tags submitted 20 minutes before the 15-minute interval. Therefore, we reject proposed section 29.10(e) and direct CAISO to make a compliance filing within 30 days after the

⁴⁰⁸ Powerex Protest at 94-95.

⁴⁰⁹ CAISO Answer at 13-14.

date of issuance of this order either explaining and providing support for its proposal, or revising this provision to reflect that energy profile information must be submitted at least 20 minutes before any 15-minute interval in the 15-minute market.

Comments

291. Neighboring Systems suggest that CAISO may have unintentionally precluded governmental entities from qualifying as EIM scheduling coordinators by requiring in proposed section 29.4 that scheduling coordinators be transmission providers subject to the Commission's standards of conduct.⁴¹⁰ Neighboring Systems argue that, because only public utilities are subject to the Commission's jurisdiction, this tariff provision should be modified to allow governmentally-owned entities to qualify as scheduling coordinators through the use of a non-disclosure agreement that restricts sharing of information between transmission and wholesale marketing functions or a voluntary code of conduct comparable to the Commission's standards of conduct.

Answer

292. In response to Neighboring Systems, CAISO states that it did not intend to exclude governmental entities from the EIM and is willing to revise the tariff along the lines suggested by Neighboring Systems if directed by the Commission.⁴¹¹

Commission Determination

293. We agree that proposed section 29.4 may have the unintended result of precluding governmental entities from qualifying as EIM scheduling coordinators. Therefore, we direct CAISO to submit tariff revisions that allow governmental entities that are not subject to the Commission's standards of conduct to become EIM scheduling coordinators through the use of non-disclosure agreements with CAISO or other comparable means. We direct CAISO to submit such proposal in a compliance filing within 30 days after the date of issuance of this order.

Comments

294. Neighboring Systems also seek clarification regarding whether generating units that import to CAISO using a pseudo-tie arrangement would be exempt from wheeling charges under CAISO's tariff.⁴¹² They are concerned that under the proposal, a

⁴¹⁰ Neighboring Systems Comments at 18.

⁴¹¹ CAISO Answer at 5.

⁴¹² Neighboring Systems Comments at 20.

generating unit that imports into CAISO using a pseudo-tie can become an EIM resource and can participate in the EIM without obtaining consent from its host BAA.

Answer

295. In response, CAISO states that imports into CAISO are not charged a wheeling access charge.⁴¹³ CAISO further states that a pseudo-tie resource that participates in the CAISO real-time market does not need to become an EIM Participating Resource to participate in EIM and, therefore, does not require the consent of its native BAA to participate in EIM.

Commission Determination

296. We find that CAISO's explanation sufficiently addresses the questions raised by Neighboring Systems.

Comments

297. Additionally, Neighboring Systems seek assurance that when Imperial Irrigation District becomes a participating transmission owner in CAISO, "it will not be required to bear any revenue shortfall resulting from the CAISO's decisions to offer license-plate rates to EIM participants."⁴¹⁴

Commission Determination

298. CAISO's participating transmission owners recover their transmission revenue requirements through their transmission owner tariffs, subject to true-ups through a transmission revenue balancing account. Neighboring Systems do not explain how or why there would be a revenue shortfall related to the EIM for Imperial Irrigation District when it becomes a participating transmission owner in CAISO. However, Imperial Irrigation District can raise any issues related to its transmission revenue recovery in the proceedings on its transmission owner tariff.

⁴¹³ CAISO Answer at 5.

⁴¹⁴ Neighboring Systems Comments at 21.

Comments

299. PacifiCorp seeks clarification regarding CAISO's definition of a Scheduling Coordinator Metered Entity and regarding tariff language on allocation flexible ramping constraint cost.⁴¹⁵ PacifiCorp also seeks confirmation that EIM base schedule of supply includes EIM base schedules for resources and interchange.⁴¹⁶

Answer

300. CAISO agrees with PacifiCorp that the language regarding the allocation of flexible ramping constraint cost should be clarified and proposes to do so on compliance. CAISO also agrees that a clarification that base schedule of supply includes EIM base schedules for resources and interchange would be useful.⁴¹⁷ In response to PacifiCorp's request for clarification regarding the term "Scheduling Coordinator Metered Entity," CAISO clarifies that the definition includes three types of entities.⁴¹⁸

Commission Determination

301. We agree that further clarification regarding the allocation of flexible ramping constraint cost, the definition of base schedule of supply, and the definition of Scheduling Coordinator Metered Entity would be helpful. Accordingly, we direct CAISO to make a compliance filing to reflect these clarifications within 30 days after issuance of this order.

⁴¹⁵ PacifiCorp Comments at 13. PacifiCorp seeks clarification that the phrase "that is not a CAISO Metered Entity" applies to all resource types that precede the phrase: "[a] Generator, Eligible Customer, Reliability Demand Response Resource, or Proxy Demand Resource that is not a CAISO Metered Entity."

⁴¹⁶ *Id.* at 13-15.

⁴¹⁷ CAISO Answer at 47-48.

⁴¹⁸ *Id.* at 6. The three types of entities are: (1) a generator, an eligible customer, an end-user, a reliability demand response resource, or a proxy demand response resource that is not a CAISO metered entity; (2) an EIM Entity; and (3) an EIM Participating Resource that elects to be a scheduling coordinator metered entity with regard to some of all of the EIM resources it represents.

8. Implementation of the EIM

Background

302. CAISO plans to conduct a simulation of the EIM on July 8, 2014.⁴¹⁹ CAISO anticipates that the EIM will commence operation on October 1, 2014.

Comments

303. Intervenors request that the Commission impose conditions on, or direct changes to, the process for implementing and expanding the EIM to address the concerns raised in their comments. First, PG&E proposes that CAISO provide quarterly reports on the performance of the EIM, beginning with its implementation and running through the first year after reinstatement of convergence bidding at the interties.⁴²⁰ PG&E suggests that such reports should include resource participation levels within each EIM Entity BAA, transmission capacity made available to the EIM by each EIM Entity, and the level of uplift costs incurred by each EIM Entity due to the EIM.⁴²¹

304. Portland General requests that the Commission require CAISO to publicly post detailed results on market simulations, including underlying data, so that CAISO stakeholders and other entities can weigh in on the potential impacts to the Western Interconnection and Western energy markets.⁴²²

305. TANC states that the Commission conditioned MRTU start-up on the receipt of CAISO's readiness certification and until the Commission considered any stakeholder concerns about CAISO's readiness.⁴²³ TANC maintains that studies of unscheduled flow

⁴¹⁹ See CAISO Transmittal Letter at 1-2.

⁴²⁰ PG&E asserts that the Commission's conditional acceptance of CAISO's proposal to reintroduce convergence bidding at the interties in May 2015 adds further complexity to the EIM's "mixed real-time market design." PG&E Comments at 8 (citing *Cal. Indep. Sys. Operator Corp.*, 146 FERC ¶ 61,204, at PP 96-103 (2014)).

⁴²¹ *Id.* at 8-9.

⁴²² Portland General Comments at 6.

⁴²³ TANC Comments at 17 (citing *Cal. Indep. Sys. Operator Corp.*, 119 FERC ¶ 61,076, at P 188 (2007)).

impacts on non-participating integrated systems need to be conducted as each new EIM Entity joins.⁴²⁴

306. Neighboring Systems contend that there should be one year of experience operating the EIM with CAISO and PacifiCorp before it is expanded to include other BAAs.⁴²⁵ Similarly, Portland General argues that CAISO should consider a more phased-in approach and suggests CAISO consider limiting EIM transfers to those between the two PacifiCorp BAAs.⁴²⁶ Portland General asserts a phased-in approach would allow for more careful study of the impacts of these limited transfers between the two BAAs and assessment of the dynamic impacts to BPA's network transmission system and potential impacts to the rest of the Western energy market, and would also provide more time to align the region's business practices for 15-minute scheduling and settlement issues before layering in the EIM.

307. Six Cities and Neighboring Systems request that the Commission convene a technical conference to discuss and resolve outstanding issues involving the EIM.⁴²⁷

308. By contrast, Wind Parties assert that the Commission should support CAISO's effort to have the EIM fully operational by October 1, 2014. Wind Parties state that CAISO and PacifiCorp already have conducted extensive modeling and a lengthy stakeholder process and intend to run a market simulation between July and October 2014. They caution that delaying the implementation of the EIM would delay the realization of significant financial and reliability benefits to consumers in the West.⁴²⁸

Answer

309. CAISO maintains that it will prepare metrics to evaluate the benefits of the EIM such as the systematic quantification of EIM benefits on congestion management as a redispatch cost savings.⁴²⁹ CAISO further asserts that other market performance metrics

⁴²⁴ *Id.*

⁴²⁵ Neighboring Systems Comments at 10.

⁴²⁶ Portland General Comments at 11-12.

⁴²⁷ Six Cities Protest at 9-10; Neighboring Systems Comments at 1, 21.

⁴²⁸ Wind Parties Comments at 8.

⁴²⁹ CAISO Answer at 90-92. CAISO states that, at a minimum, it expects to discuss these metrics as a part of normal market performance review offered

(continued...)

will be updated to include parameters associated with the EIM and that the metrics will be tested as part of the market simulation and made public. CAISO states that, once the EIM is operational, CAISO intends to report on these metrics as a regular part of its ongoing market performance reporting efforts. CAISO asserts that, as an extension of CAISO's real-time market, the EIM will include the reported metrics that will be published in connection with CAISO's market reports.

310. In response to Portland General's request that the Commission require CAISO to post detailed results of its market simulation, CAISO states that no such Commission directive is necessary.⁴³⁰ CAISO asserts that it will conduct a market simulation to allow the EIM Entity, other EIM Market Participants, other market participants, and interested stakeholders the opportunity to review results of both structured and unstructured scenarios.⁴³¹ CAISO maintains that it will make market simulation data available via specified market systems and that technical specifications for the systems can be found on the public release planning page. CAISO asserts that it will hold regular stakeholder calls during the market simulation period that may be increased to three or four times a week if needed to communicate with external parties. CAISO states that prospective EIM Market Participants can attend these forums and can view public data on CAISO's website.⁴³²

311. CAISO maintains that the phased-in approach suggested by Portland General also is unnecessary.⁴³³ CAISO argues that the initial operation of the EIM already is limited to three BAAs, with limited transfers between them. CAISO maintains that it has worked with BPA to address any impact on its system and the parties have entered a memorandum of understanding. CAISO asserts that the market simulation will provide adequate opportunity to assess the operations. In addition, CAISO states that its

approximately every six weeks. CAISO states that it will also incorporate these metrics in its monthly market performance reports and metric catalog.

⁴³⁰ *Id.* at 93-94.

⁴³¹ CAISO states that structured scenarios will demonstrate specific, pre-defined market scenarios and are currently posted on CAISO's public website. CAISO maintains that unstructured scenarios will allow PacifiCorp and other market participants to submit input data based on their testing needs to validate the EIM results. *Id.*

⁴³² *Id.* at 94.

⁴³³ *Id.* at 92.

proposed EIM tariff provisions enable CAISO to suspend operation of the market as necessary to address any unforeseen operational issues.

Commission Determination

312. We find that CAISO's proposal to commence the EIM on October 1, 2014, subsequent to completion of a market simulation, is reasonable, and will not require any additional conditions or revisions to the proposed process. Having found CAISO's proposed tariff revisions implementing the EIM, subject to the compliance filings directed herein, to be just and reasonable, we do not find it necessary to implement other procedures, such as a technical conference, as Six Cities and Neighboring Systems request.

313. Specifically, we decline to direct CAISO to make available periodic reports, as CAISO already has committed to expanding reported metrics to include the EIM and to publish these metrics along with CAISO's market reports. We expect CAISO to report on these metrics as a regular part of its ongoing market performance reporting efforts. Requiring CAISO to post market simulation results is likewise unnecessary, as CAISO has committed to holding regular stakeholder calls during the market simulation. We expect CAISO will keep participants informed by posting detailed results of its market simulation and providing stakeholders an opportunity to review results.

314. Additionally, in light of CAISO's market simulation processes and the need to promptly implement the EIM so consumers in the West can begin to realize the financial and reliability of the EIM, we find it unnecessary to require a more phased-in approach to implementation of the EIM, such as by initially limiting EIM transfers to the two PacifiCorp BAAs. As discussed in section IV.B.6.c, we do not find the potential impact of unscheduled flows to be unreasonable. Furthermore, CAISO will be conducting a market simulation and has committed to allowing market participants and interested stakeholders the opportunity to review simulation results and assess the operations.

9. Issues Addressed in Docket No. ER14-1578-000

Background

315. Certain commenters raise concerns that are specific to PacifiCorp's participation in the EIM, as proposed in PacifiCorp's filing in Docket No. ER14-1578-000.

Comments

316. Powerex asserts that PacifiCorp has not demonstrated that its proposal to secure transmission capacity for EIM transfers via a transfer of transmission capacity from its merchant affiliate is just and reasonable.⁴³⁴

317. Similarly, PG&E raises concerns in its answer with respect to a provision in PacifiCorp's proposal that would permit PacifiCorp to suspend its participation in the EIM if, during the first 12 months, it determines in consultation with CAISO and the Department of Market Monitoring that there exist market design issues that could be effectively remedied by rule or tariff changes.⁴³⁵ PG&E states that EIM Entities should not be permitted to temporarily opt out of dispatch and settlement through the EIM without proper review by the Commission.

Answers

318. In its answer, CAISO asserts that Powerex's concern is beyond the scope of this proceeding, as CAISO's proposed revisions to its tariff do not address the implementation of the EIM with respect to any particular BAA.⁴³⁶ PacifiCorp maintains in its answer that the proposed transfer of transmission capacity is not a sale, transfer, or reassignment subject to section 23 of PacifiCorp's OATT, and states that the ability to co-optimize dispatch between BAAs is crucial to realizing the full benefits of the EIM.⁴³⁷

Commission Determination

319. We find the issues raised by Powerex and PG&E with respect to PacifiCorp's EIM proposal in Docket No. ER14-1578-000 to be beyond the scope of this proceeding. CAISO's proposed tariff revisions in this proceeding do not address the manner in which the EIM will be implemented with respect to PacifiCorp or any other particular BAA. Issues regarding PacifiCorp's proposal regarding transfers of transmission capacity and suspension for market contingencies are appropriately raised—and indeed have been raised—in Docket No. ER14-1578-000, and are thus addressed in the order issued in that proceeding.

⁴³⁴ Powerex Protest at 87-89.

⁴³⁵ PG&E Answer at 3-4.

⁴³⁶ CAISO Answer at 16-17.

⁴³⁷ PacifiCorp Answer at 27-29.

The Commission orders:

(A) CAISO's proposed *pro forma* service agreements and tariff revisions are hereby conditionally accepted for filing, to be effective July 1, 2014 and September 23, 2014, as requested, subject to further modifications, as discussed in the body of this order.

(B) CAISO's request for waiver of the Commission's maximum 120-day prior notice requirement, 18 C.F.R. § 35.3(a)(1) (2013), is hereby granted, as discussed in the body of this order.

(C) CAISO's request for waiver of the applicable requirements of section 35.13 of the Commission's regulations, 18 C.F.R. § 35.13 (2013) is hereby granted, as discussed in the body of this order.

(D) CAISO is hereby directed to make the compliance filings specified in the body of this order, within the timeframes provided in the body of this order.

(E) CAISO is hereby directed to file, within 30 days after the completion of the EIM business practice manual stakeholder process, any necessary additions to its OATT.

(F) CAISO is hereby directed to include its proposed resource sufficiency tests and validation processes in the EIM business practice manual, as discussed in the body of this order.

(G) CAISO is hereby directed to provide the Commission with informational reports on the presence of structural market power, as discussed in the body of this order.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.