160 FERC ¶ 61,058 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;

Cheryl A. LaFleur, and Robert F. Powelson.

California Independent System Operator Corporation Docket No. ER17-1796-000

ORDER ON IMPLEMENTATION AGREEMENT

(Issued September 7, 2017)

1. On June 9, 2017, the California Independent System Operator Corporation (CAISO) submitted, under section 205 of the Federal Power Act (FPA),¹ an Implementation Agreement between CAISO and Powerex Corp. (Powerex) setting forth the terms under which CAISO will enable Powerex's participation in CAISO's Energy Imbalance Market (EIM). On August 9, 2017, pursuant to the authority delegated to the Director, Division of Electric Power Regulation – West, Office of Energy Market Regulation, in the Commission's February 3, 2017 Order Delegating Further Authority to Staff in Absence of Quorum,² the Implementation Agreement was accepted for filing, suspended for a nominal period, to become effective August 15, 2017, as requested, subject to refund and further Commission order.³ In this further order, as discussed below, we accept CAISO's filing, effective August 15, 2017, as requested.

I. Background

2. The EIM enables entities outside the CAISO balancing authority area to participate in the CAISO-administered real-time market for imbalance energy. Since its inception, the EIM has developed and expanded, attracting the interest of a diverse array of participants throughout the Western Interconnection.

¹ 16 U.S.C. § 824d (2012).

² Agency Operations in the Absence of a Quorum, 158 FERC ¶ 61,135 (2017).

³ California Independent System Operator Corp., Docket No. ER17-1796-000 (Aug. 9, 2017) (delegated letter order).

3. The Implementation Agreement between CAISO and Powerex establishes the preparatory activities necessary to enable Powerex's participation in the EIM and is the first to permit an entity with resources located in a balancing authority area outside the United States to participate in the EIM. Powerex is a Canadian corporation with its principal place of business in Vancouver, British Columbia. As an independent, wholly owned subsidiary of British Columbia Hydro & Power Authority (BC Hydro), a Provincial Crown Corporation, Powerex, in its own capacity, markets the residual capability of the BC Hydro system and is a participant in energy markets across North America. BC Hydro acts as a balancing authority, generation owner, transmission owner, and service provider in the Province of British Columbia under the regulatory authority of the British Columbia Utilities Commission.⁴

II. June 9 Filing

A. Participation Framework

- 4. CAISO asserts that it is working with Powerex to develop an EIM participation framework that accounts for the unique legal and regulatory considerations that arise from Powerex's EIM participation with resources and load in Canada, while continuing to preserve all CAISO functional tariff obligations necessary for EIM participation. CAISO explains that the anticipated participation framework will provide for Powerex's participation in the EIM with (1) voluntary offers from residual BC Hydro flexible generation; (2) intra-hour deviations in load and generation in the BC Hydro balancing authority area; and (3) transmission arrangements to support EIM transfers.⁵ CAISO states that the parties intend that Powerex's EIM participation and CAISO's activity as the market operator remain subject to the Commission's jurisdiction under the FPA, without disrupting or altering the legal and regulatory structures and requirements applicable to BC Hydro's actions within the Province of British Columbia.⁶
- 5. CAISO explains that BC Hydro will not assume a participant role or undertake commercial activities in the EIM. However, CAISO states that BC Hydro will supply certain data and information directly to CAISO that is needed for Powerex's participation. As such, CAISO anticipates entering a data sharing agreement with

⁴ CAISO Transmittal Letter at 2.

⁵ *Id.* at 4.

⁶ *Id*.

BC Hydro that CAISO intends to file with the Commission along with other agreements to support Powerex's participation.⁷

B. <u>Project Scope and Schedule</u>

6. Exhibit A to the Implementation Agreement details the activities and delivery dates needed to support Powerex's implementation in the EIM, planned for April 4, 2018. According to the Implementation Agreement, either party may propose a change in the project scope or the implementation date. If either party proposes a change, the parties will negotiate in good faith in an attempt to reach agreement as to the proposal and any necessary changes to the scope and schedule, provided that any such change must be mutually agreed to by the Parties. Mutually agreed-to changes to Exhibit A will be memorialized in a revision to Exhibit A, which CAISO and Powerex would post on their websites. Any changes beyond Exhibit A (i.e., other than the project scope and schedule) shall be reflected in an executed amendment to the Implementation Agreement and filed with the Commission.⁸

C. Implementation Fee

- 7. The Implementation Agreement specifies that Powerex will pay a fixed implementation fee of \$1,923,955, subject to completion of specified milestones. CAISO explains that the amount of the implementation fee is based on Powerex's portion of the estimated \$19.65 million CAISO would incur if it were to configure its real-time energy market to function as an EIM available to all balancing authority areas in the Western Electricity Coordinating Council (WECC). In addition, CAISO asserts that it confirmed the reasonableness of the implementation fee by comparing it to an estimate of the costs CAISO projects it will incur to configure its real-time energy market to function as an EIM that serves both CAISO and Powerex.⁹
- 8. The Implementation Agreement provides that the parties can adjust the phase 1 implementation fee by mutual agreement if CAISO's actual or expected costs exceed the estimate that forms the basis of the implementation fee.¹⁰

⁷ *Id.*

⁸ Implementation Agreement, § 3(c).

⁹ CAISO Transmittal Letter at 7-8.

¹⁰ *Id.* at 8.

D. Principles

- 9. CAISO states that, similar to the approach taken in the CAISO-PacifiCorp EIM Implementation Agreement, which preceded the development of the EIM design, the Implementation Agreement adopts eight principles (collectively, Principles) to guide the negotiation and implementation of the agreements that will be necessary to support Powerex's participation in the EIM. CAISO asserts that it has included the Principles in the Implementation Agreement to facilitate the Commission's understanding of the anticipated nature of Powerex's participation, but emphasizes that nothing in the Implementation Agreement prejudges or predetermines any outcome. According to CAISO, Powerex and CAISO will develop and file under FPA section 205 EIM participation agreements that will reflect the legal and regulatory considerations specific to Powerex's participation in the EIM. CAISO asserts that the Commission should defer judgment on Powerex's participation framework until that proceeding.
- The eight Principles are incorporated into section 14 of the Implementation 10. Agreement, which states that various events during the course of Powerex's implementation into the EIM may require adjustments, but Powerex's implementation "shall nevertheless be implemented consistent with the following Principles, which will form the basis of the Powerex participation Agreement." The eight Principles address: (a) the EIM arrangement for Powerex's participation using generation resources that are owned and operated by BC Hydro, a Canadian entity located wholly outside the United States; (b) a structure designed to preserve functional CAISO tariff obligations and enable CAISO visibility and access necessary for EIM operations, while also preserving existing legal and regulatory authorities and jurisdictions; (c) compatibility of the Canadian EIM arrangement with the rest of CAISO's EIM framework; (d) data sharing between CAISO and BC Hydro; (e) the voluntary nature of Powerex's EIM participation; (f) Powerex's rights and obligations regarding bilateral real-time market activities outside the EIM; (g) local market power mitigation; and (h) the applicability of greenhouse gas regulations to Powerex's EIM transactions. 15

¹¹ Cal Indep. Sys. Operator Corp., 143 FERC ¶ 61,298 (2013).

¹² CAISO Transmittal Letter at 3.

¹³ *Id.* at 4.

¹⁴ *Id.* at 4-5.

¹⁵ Implementation Agreement, § 14.

E. Framework to Resolve Differences

11. The Implementation Agreement recognizes that the parties are entering the agreement on a voluntary basis and that circumstances may arise that interfere with incorporating Powerex into the EIM. The Implementation Agreement thus allows either party to terminate the agreement for any or no reason, provided it has first entered into good faith discussions for thirty days prior in an effort to resolve any differences. ¹⁶

III. Notice and Responsive Pleadings

12. Notice of the June 9 Filing was published in the *Federal Register*, 82 Fed. Reg. 27,803 (2017), with interventions and protests due on or before June 30, 2017. Timely motions to intervene were filed by Arizona Public Service Company, Avangrid Renewables, LLC, Balancing Area of Northern California, Bonneville Power Administration, Cities of Santa Clara, California and Redding, California and the M-S-R Public Power Agency, Modesto Irrigation District, Northern California Power Agency, NV Energy, Inc., PacifiCorp, Puget Sound Energy, Inc., and Sacramento Municipal Utility District. Timely motions to intervene and comments were filed by Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SoCal Edison), and Powerex. Comments were also filed by Idaho Power Company, Puget Sound Energy, Portland General Electric Company, PacifiCorp, Arizona Public Service, and NV Energy (collectively, EIM Participants). On July 14, 2017, CAISO submitted an answer in response to comments.

A. <u>Comments</u>

13. SoCal Edison, PG&E, and the EIM Participants state that they are not opposed to Powerex's participation in the EIM, but seek clarification and further explanation from CAISO regarding some areas of concern.¹⁷ The EIM Participants seek clarification regarding how CAISO intends to implement section 8(b) of the Implementation Agreement, which states that the Implementation Agreement "may be modified to include one or more additional parties upon mutual agreement . . . if the new party agrees to fund its share of implementation costs in a manner similar to Powerex." The EIM

¹⁶ *Id.*, § 2.

¹⁷ EIM Participants Comments at 1; SoCal Edison Comments at 2; PG&E Comments at 3.

Participants state that no other implementation agreement contains this provision and it is not explained in CAISO's transmittal letter. ¹⁸

- 14. Commenters also seek clarification on the effect of two of the Principles and potential changes to the EIM framework that will be required to integrate Powerex. Specifically, the EIM Participants seek clarification from CAISO that any changes to the EIM market rules will be applied uniformly to Powerex and all other EIM participants, and not just that Powerex will be under a "compatible" framework as contemplated by Principle C.¹⁹
- 15. The EIM Participants and SoCal Edison also both seek clarity from CAISO regarding Principle F of the Implementation Agreement.²⁰ Principle F provides:

Consistent with the current design of the EIM, Powerex shall have the continued ability to enter into non-EIM transactions, including after the CAISO's base scheduling timelines. These transactions will not create energy imbalance that must be served by the EIM, provided they utilize residual capability of the BC Hydro system that has not been offered into the EIM.²¹

16. These commenters assert that Principle F appears to be in conflict with the CAISO tariff because, while the CAISO tariff allows EIM Entities to enter into transactions after the submission of the base scheduling timelines, those transactions could create an energy imbalance and an associated obligation. Additionally, they question how Principle F will work in practice since base schedules determine imbalances to be settled through the EIM.²² SoCal Edison also seeks clarification regarding how Powerex could make transactions after the base schedule deadline without having the potential for inappropriate knowledge of market clearing prices prior to making those decisions. According to SoCal Edison, it is unclear how it

¹⁸ EIM Participants Comments at 3.

¹⁹ *Id.* at 2-3.

²⁰ EIM Participants Comments at 2-3; SoCal Edison Comments at 2-3.

²¹ Implementation Agreement, § 14(f).

²² SoCal Edison Comments at 2-3.

would be determined whether a transaction as described under Principle F of the Implementation Agreement would be considered within or outside of the market.²³

- 17. PG&E notes that the proposed Implementation Agreement represents a departure from the EIM's original structure, which was envisioned for balancing authorities only. According to PG&E, changes to the EIM framework may be necessary in order to integrate Powerex, and the following areas will need to be explored: enhancements to market power mitigation; rules around jurisdictional oversight to the degree Powerex is acting as an agent for providing balancing for BC Hydro; how Powerex would make transmission available for EIM use while complying with open access rules; and modeling and pricing of energy from BC Hydro.²⁴
- 18. Powerex submitted comments in support of the filing, in which it notes that it expects ongoing dialogue and close coordination with Bonneville Power Administration and the EIM Participants as it works with CAISO to meet its implementation milestones.²⁵

B. CAISO's Answer

19. CAISO states that the Implementation Agreement is intended to establish CAISO and Powerex's commitment to work towards development of a participation framework that accommodates Powerex's unique circumstances in a manner that is compatible with the established EIM framework and market rules. CAISO asserts that the Implementation Agreement does not establish binding terms for Powerex's participation in the EIM. As such, CAISO argues that it is premature to consider the merits of the substantive framework that will be used to facilitate Powerex's participation in the EIM, because it is beyond the scope of this proceeding. CAISO states that the terms and conditions of Powerex's participation in the EIM will be set forth in participation agreements that will be separately filed for Commission review pursuant to section 205 of the FPA. CAISO stresses that nothing in the Implementation Agreement prejudges or predetermines the outcome of these proceedings.

²³ *Id.* at 3.

²⁴ PG&E Comments at 3.

²⁵ Powerex Comments at 5.

²⁶ CAISO Answer at 4.

- 20. With respect to the EIM Participants' concern regarding the provision of the Implementation Agreement that would permit the parties to amend the Implementation Agreement to add an additional party, CAISO states that this same provision was included in the CAISO-PacifiCorp Implementation Agreement. CAISO states that if it and Powerex decide to add an additional party to the Implementation Agreement, they would be required to file a section 205 filing supporting the proposal. CAISO notes that there are no additional parties being contemplated at this time.²⁷
- 21. CAISO states that it understands and appreciates the concerns raised by commenters, and that CAISO and Powerex will continue to engage in outreach and dialogue with interested stakeholders as they move forward with developing a framework that accounts for Powerex's unique circumstances and respects the existing EIM structure.²⁸

IV. <u>Discussion</u>

A. <u>Procedural Matters</u>

- 22. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2017), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.
- 23. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2017), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We will accept CAISO's answer because it has provided information that assisted us in our decision-making process.

B. Commission Determination

24. We find that the terms of the Implementation Agreement are just and reasonable and not unduly discriminatory or preferential and therefore accept it, to be effective August 15, 2017, as requested. The Implementation Agreement is a bilateral agreement between CAISO and Powerex that sets forth the terms under which CAISO will enable Powerex's participation in the EIM. The Implementation Agreement also provides for Powerex to pay CAISO a fixed implementation fee of \$1,923,955, subject to the completion of specified milestones. The implementation fee is based on CAISO's

²⁷ *Id.* at 6-7.

²⁸ *Id.* at 6.

estimate of the costs it would incur if it were to configure its real-time energy market to function as an EIM available to all balancing authority areas in WECC. The implementation fee allocates a portion of that projected overall cost to Powerex in an amount proportionate to Powerex's benefits from the EIM, as measured by BC Hydro's load, consistent with the methodology CAISO has used to allocate implementation fees for other EIM participants. We also note that no party has contested the reasonableness of the estimate on which the implementation fee is based.

- 25. In addition, we find that CAISO has satisfactorily addressed the EIM Participants' request that CAISO clarify how it would implement section 8(b) of the Implementation Agreement, which provides that the parties may agree to modify the Implementation Agreement to include another party. In the event CAISO and Powerex seek to amend the Implementation Agreement to include an additional party, CAISO asserts that it and Powerex would submit an FPA section 205 filing with the Commission supporting this change to the Implementation Agreement. At that time and in that proceeding, any interested stakeholder would have an opportunity to submit comments regarding the proposed modification.
- 26. Similarly, we find comments concerning the guiding principles set forth in the Implementation Agreement and the terms of Powerex's participation in the EIM to be premature, given that CAISO and Powerex have not yet developed or proposed the specific terms and conditions of the framework under which Powerex will participate. We expect CAISO to follow through with its commitment to consider the issues raised by commenters and to engage in outreach and dialogue with interested stakeholders as the framework is developed.²⁹ And, as CAISO acknowledges, the terms and conditions of Powerex's participation in the EIM will be subject to the Commission's review of the participation agreements that will be separately filed pursuant to FPA section 205. Accordingly, we accept CAISO's commitment to set forth the rules and procedures governing Powerex's EIM participation framework in an agreement filed with the Commission, in addition to filing corresponding *pro forma* CAISO service agreements and any needed CAISO tariff revisions.³⁰ Stakeholders will have an opportunity to raise concerns regarding CAISO's proposed framework with the Commission at that

²⁹ See id.

³⁰ See CAISO Transmittal Letter at 5.

time. We note that our acceptance of the Implementation Agreement does not in any way prejudge or predetermine the outcome of these proceedings.

The Commission orders:

The Implementation Agreement is hereby accepted, effective August 15, 2017, as discussed in the body of this order.

By the Commission.

(SEAL)

Kimberly D. Bose, Secretary.