UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

California Independent System Operator Corporation	)))	Docket No. ER14-1386-000

MOTION AND ANSWER TO COMMENTS AND PROTESTS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

The California Independent System Operator Corporation ("ISO") respectfully submits this motion for leave to answer and answer[1] to the protests and comments submitted in the above-captioned proceeding in response to the ISO's tariff amendments to implement an Energy Imbalance Market.

I. BACKGROUND

On February 28, 2014 the ISO submitted for filing proposed amendments to the ISO tariff to provide other balancing authority areas the opportunity to participate in a real-time market for imbalance energy that the ISO currently operates in its own balancing authority area. The amendments define the set of rules and procedures governing the ISO's expansion of the real-time market as the Energy Imbalance Market. To implement the Energy Imbalance Market, the ISO proposed the following tariff amendments: (1) a new section of the tariff with the provisions specific to the Energy Imbalance Market, set forth in section 29 of the ISO tariff; (2) new definitions specific to the Energy Imbalance Market in Appendix A; (3) revisions to existing tariff provisions and definitions, as necessary to accommodate the Energy Imbalance Market; and (4)

[1] The ISO submits this motion and answer pursuant to Rules 212 and 213 of the Commission's Rules of Practice and Procedure, 18 C.F.R. §§ 385.212, 385.213 (2013).

new pro forma agreements for use by participants in the Energy Imbalance Market, which are added to Appendix B of the ISO tariff.

The ISO requested a Commission order by June 20, 2014 in order to provide market participants a level of certainty with respect to the market rules that will apply in the simulation scheduled for July 8, 2014, and to enable the ISO to make adjustments to its systems, if necessary, without delaying the market simulation. Additionally, the ISO requested a September 23, 2014 effective date for the tariff amendments, so that the necessary advance data submissions may be made by participants for the EIM to commence operations on October 1, 2014. Finally, the ISO requested a July 1, 2014 effective date for the various agreements to be executed by EIM market participants, just prior to market simulation.

The Commission noticed this proceeding for comment and several parties moved for a 45 day extension of time, which the Commission granted in part extending the deadline to file by 10 days. Numerous parties submitted motions to intervene.[2]

[2] Powerex Corporation ("Powerex"); the Transmission Agency of Northern California ("TANC"); the Modesto Irrigation District ("Modesto"); Public Utility District No. 2 of Grant County Washington; the City of Seattle, Seattle City Light ("Seattle"); Bonneville Power Administration ("Bonneville"); the Sacramento Municipal Utility District ("SMUD"); the Imperial Irrigation District ("IID"); and the City of Los Angeles Department of Water and Power ("LADWP"); Portland General Electric Company ("Portland"); Puget Sound Energy, Inc.; NRG Companies; Alliance for Retail Energy Markets; Natural Resources Defense Council ("NRDC"); Public Utility District No. 1 of Chelan County, Washington ("Chelan"); Avista Corporation; the Cities of Anaheim, Azusa, Banning, Colton, Pasadena and Riverside ("Six Cities"); Golden State Water Company' Western Area Power Administration; Public Generating Pool; Western Power Trading Forum ("WPTF"); Salt River Project Agricultural Improvement and Power District; the California Public Utilities Commission ("CPUC"); J.P. Morgan Ventures Energy Corporation; Balancing Authority of Northern California; Goshen Phase II, LLC; Pacific Gas and Electric Company ("PG&E"); Cogeneration Association of California; Imperial Irrigation District; Public Service Company of Colorado; PacifiCorp; San Diego Gas & Electric Company; Tri-State Generation and Transmission Association, Inc. ("Tri-State"); Utah Associated Municipal Power Systems ("Utah"); Iberdrola Renewables, LLC ("Iberdrola"), PUC EIM Group; Morgan Stanley Capital Group Inc.; Electric Power Supply Association; Nevada Power Company and Sierra Power Company,

Numerous parties filed comments that were supportive of or neutral regarding the ISO's proposal, but recommended changes in or expressed concerns about portions of the ISO's tariff amendments.[3] Eight parties filed supportive comments without any recommendations or concerns.[4] Powerex and Bonneville filed Protests.

II. MOTION FOR LEAVE TO ANSWER PROTESTS

The ISO respectfully requests authorization to respond to the protests filed in this proceeding. Notwithstanding Rule 213(a)(2),[5] the Commission has accepted answers to protests that assist the Commission's understanding and resolution of the issues raised in the protest,[6] clarify matters under consideration,[7] or materially aid the Commission's disposition of a matter.[8] The protests include many arguments that the protestors did not fully develop during the stakeholder process, and to which the ISO therefore could not respond in the transmittal. In addition, the protests include erroneous statements that require correction. The ISO's answer will therefore clarify

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California Department of Water Resources State Water Project, Renewable Northwest Project, City of Redding California, M-S-R Public Power Agency, City of Santa Clara, Southern California Edison Company ("Edison"), Northern California Power Agency, California Municipal Utilities Association ("CMUA"), and the California Energy Commission and the California Air Resources Board.

3 WPTF, Powerex, PG&E, PacifiCorp, Modesto, Chelan, Tri-State, Utah, Iberdrola, TANC, CUMA, Six Cities, Bonneville, Redding, Seattle, Santa Clara (adopting the comments of TANC and CMUA), NCPA (adopting comments of the CUMA), Edison, SMUD, IID, and LADWP (collectively, Neighboring Entities"), Portland.

4 PUC EIM Group; CPUC; Xcel Energy Services; San Diego Gas and Electric Co.; The Electric Power Supply Company; Nevada Power Co. and Sierra Power Company; the American Wind Energy Association, the California Wind Energy Association, the Center for Energy Efficiency and Renewable Technologies, and Renewable Northwest; and the California Air Resources Board and California Energy Commission.

5 18 C.F.R. § 385.213(a)(2) (2013).

6 *Southwest Power Pool, Inc.,* 89 FERC ¶ 61,284 at 61,888 (1999).

7 *Tennessee Gas Pipeline Co*., 82 FERC ¶ 61,045 at 61,186 n.5 (1998).

8 *El Paso Natural Gas Co*., 82 FERC ¶ 61,052 at 61,200 (1998).

matters under consideration, aid the Commission's understanding and resolution of the issues and help the Commission to achieve a more accurate and complete record, on which all parties are afforded the opportunity to respond to one another's concerns.[9] Accordingly, the Commission should accept this Answer.

III. ANSWER

The ISO has organized this answer using the same topics, and in the same order, as discussed in the February 28, 2014 transmittal letter.

A. EIM Market Participants

Neighboring Systems express concern that proposed section 29.4 may preclude governmental utilities from qualifying either as an "EIM Scheduling Coordinator" or an "EIM Participating Resource Scheduling Coordinator". They noted that both definitions seek to ensure that Scheduling Coordinators do not share transmission information inappropriately by requiring that a Scheduling Coordinator "must be a transmission provider subject to the Commission's standards of conduct set forth in 18 C.F.R. Section 358," which would exclude governmental entities.[10] Neighboring Systems suggest the use of either a non-disclosure agreement that restricts sharing of the confidential information with personnel engaged in wholesale power marketing or a voluntary code of conduct containing terms comparable to those in FERC's standards of conduct.

It was not the ISO's intent to exclude non-jurisdictional entities from the Energy Imbalance Market, but only to ensure that appropriate barriers between the merchant

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[9] *N. Border Pipeline Co.*, 81 FERC ¶ 61,402 at 62,845 n.16 (1997); *Hopkinton LNG Corp*., 81 FERC ¶ 61,291 at 62,382 n.4 (1997).

[10] Neighboring Systems at 18-19.

and transmission functions are in place. Accordingly, the ISO is willing to revise the provision along the suggested lines on compliance if so directed by the Commission.

Imperial Irrigation District states its understanding that dynamically-scheduled resources remain under the control of the native balancing authority area where the resource is interconnected, but pseudo-tied resources are under the control of the attaining balancing authority area where the energy or ancillary services are delivered. Imperial Irrigation District now notes that the definition of "EIM Resource" proposed by the ISO in the Tariff filing in this proceeding includes pseudo-tied resources into the ISO balancing authority area and asks whether this means that a pseudo-tie generating unit could participate in the Energy Imbalance Market solely with the attaining balancing authority's consent to participate, and not the native balancing authorities' consent. Imperial Irrigation District also asks whether, if so, the ISO also intends to exempt EIM Transfers from a pseudo-tie generating unit from ISO wheeling charges under the ISO Tariff when energy is imported into the ISO.[11]

A pseudo-tie into the ISO balancing authority area is treated as generation located in the ISO balancing authority area.[12] As such, the pseudo-tie import is not subject to a wheeling access charge, regardless of the dispatch instruction sent. The ISO notes, however, that no import into the ISO is charged a wheeling access charge. The load served by pseudo-tie generation, as well as the load served by other imports, does pay the transmission access charge.

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11 Neighboring Systems at 20.

12 ISO Tariff, Appendix N.

A pseudo-tie to the ISO that participates in the ISO's real-time market through its status as a pseudo-tie would not need to become an EIM Participating Generator, thereby mooting the need for the consent of its native balancing authority area in order to participate in the Energy Imbalance Market.[13] A pseudo-tie to PacifiCorp would only need to meet the eligibility requirements for EIM Participating Resources under the attaining balancing authority, and PacifiCorp has similarly proposed to allow such participation. In addition, a pseudo-tie into the ISO would be exempt from the wheeling access charge when participating in the Energy Imbalance Market, even though the energy it produces may be further transferred to PacifiCorp. Load in PacifiCorp served by the pseudo-tie into the ISO would pay PacifiCorp for transmission that may be applied under PacifiCorp's tariff. Load in the ISO served by a pseudo-tie into PacifiCorp would pay the ISO transmission access charge pursuant to the ISO tariff.

PacifiCorp requests clarification of the ISO's defined term "Scheduling Coordinator Metered Entity."[14] The ISO clarifies that the definition is intended to include three types of entities: (1) a Generator, an Eligible Customer, an End-User, a Reliability Demand Response Resource, or a Proxy Demand 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 or all of the EIM Resources it represents.

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[13] A pseudo-tie to the ISO balancing authority is a participant in the ISO's real time market and, although it could be dispatched to serve load in the EIM area outside the ISO balancing authority area, it is not an EIM Participating Resource.

[14] PacifiCorp at 13.

Seattle asserts that participation in the Energy Imbalance Market should be voluntary. It contends that many proposed provisions of the ISO tariff will require non-participants to change actions and incur costs they would not otherwise incur and that the Commission should ensure that these changes are necessary and in the interest of the non-participants.[15] Participation in the Energy Imbalance Market is of course voluntary. Whether there is an impact on non-participants is a different issue. The just and reasonable standard does not require that the ISO tariff be "in the interest of the non-participants," but only that it not affect them in an unjust, unreasonable or unduly discriminatory or preferential manner. In the transmittal letter and this answer, the ISO has shown that its proposal does not have such impacts.[16] Seattle does not show otherwise.

B. Communications

Powerex states that the tariff must provide protection to ensure that EIM Market Participants' information cannot be used for "non-EIM purposes" absent consent of the implicated participant. Powerex states that if information shared by EIM Entities is to be used by the ISO for non- Energy Imbalance Market purposes, the ISO should seek the agreement of external transmission providers and balancing authorities to do so. Powerex states that any agreement relating to such information sharing should be filed with the Commission.[17]

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[15] Seattle at 5.

[16] It is possible that non-participants may be affected by revisions to the open access tariffs of EIM Transmission Service Providers in the EIM Entity balancing authority area, such as by provisions to allocate imbalance energy charges. Non-participants can address such issues in the proceeding concerning the applicable open access tariff.

[17] Powerex at 84-85.

The ISO is not clear what Powerex means by “non- EIM purposes” or how the ISO would define that in order to respond to Powerex’s request. Section 20 of the ISO tariff includes extensive confidentiality provisions, approved by the Commission as just and reasonable. These provisions, which would apply to the Energy Imbalance Market, adequately protect confidentiality, while ensuring transparent operations and the ISO’s ability to comply with its regulatory obligations. If Powerex believes that there are specific types of information that EIM Entities would provide that are not protected by section 20, the ISO would certainly consider appropriate revisions to section 20. Powerex has not, however, identified as yet any reason why the protections of section 20 are inadequate.

C. Normal and Emergency Operations

A number of parties express concern about the impact that the operation of the Energy Imbalance Market may have on other systems. TANC asks that the Commission condition approval of the Energy Imbalance Market on the ISO’s performance of pre-implementation testing and studies demonstrating that the Energy Imbalance Market will not adversely impact “non-EIM participating transmission”, and a directive that the ISO enter into mitigation agreements or other measures to resolve any such adverse impacts that may arise for “non-EIM transmission owners”. It asks that any order approving the ISO’s Energy Imbalance Market proposal should state explicitly that EIM Transfers will only be made from transmission rights that are subject to the ISO’s operational control and will not use or in any way reduce TANC’s allocated share of the Available System Transfer Capability (i.e., the physical capability to transmit

power across the California Oregon Intertie), including in the event of a curtailment.[18] Others express similar concerns.[19]

These concerns are unfounded. As an initial matter, the Energy Imbalance Market does not include any right or obligation that would change the manner in which intertie transactions are handled.[20] EIM Transfers across the California-Oregon Intertie will use PacifiCorp's rights made available for such purposes and capacity that is currently under the ISO's operational control, or any other rights and capacity specifically made available to the Energy Imbalance Market by EIM Transmission Service Providers. It will not use TANC's rights or those of any other owner or rights holder on the California-Oregon Intertie or elsewhere. The Energy Imbalance Market will only use the capacity made available by the ISO's Participating Transmission Owners or by EIM Transmission Service Providers as a dynamic schedule that will not have any impact on current flows.[21] The only difference between the ISO's current operations and the Energy Imbalance Market is that the market will ensure that the most efficient resources are used to serve load, recognizing the transmission constraints, and based on available EIM Transfer limits.

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18 TANC at 15-17.

19 Redding at 9; Santa Clara at 7; CMUA at 7; Portland at 4-6.

20 The ISO is the path operator for the southern portion of the California-Oregon Intertie and is not aware of any change in the processes or procedures it administers that would reduce an owner's or rights holder's share of capacity on that intertie. As TANC notes, the ISO is under a contractual obligation to respect the transmission rights of others on the California-Oregon Intertie, and the Commission does not need to direct the ISO to respect rights that it is already obligated to respect by a Commission jurisdictional contract. *See Pacificorp*, 137 FERC ¶ 61,151 (2011) (order accepting amendments to the California-Oregon Intertie Path Operator Agreement and Owners Coordinated Operations Agreement).

21 Bonneville has expressed some concerns regarding dynamic transfers across COI and has established limits referred to as the "Dynamic Transfer Capability," which are allocated according to its business practices. The ISO does not enforce any such limits at this time.

Portland notes that it is a Bonneville transmission network customer and expresses its concern with the potential for increased congestion and curtailment issues on Bonneville's system. Portland requests that the Commission assess the Energy Imbalance Market proposal with these concerns in mind and consider requiring the ISO to demonstrate that affected stakeholders have a procedural mechanism to rapidly resolve disputes or, if necessary, rapidly request Commission action in the event the Energy Imbalance Market has any detrimental reliability impact once implemented.[22] The ISO explained in the transmittal letter that it has entered into a memorandum of understanding with PacifiCorp and Bonneville to ensure that transfers between the PacifiCorp balancing authority areas and the ISO, using transmission rights on Bonneville's system made available for that purpose, are managed appropriately.[23] This agreement should suffice to address Portland's concerns. It is notable that Bonneville, the owner of the rights in question, has not included this issue in its protest.

Tri-State states that there remain questions about how transactions in the Energy Imbalance Market will be treated for purposes of allocating curtailments due to the facts that (1) WECC's unscheduled flow procedures depend on transmission tags to identify and allocate curtailment priorities, (2) the ISO intends to only tag the net of the Energy Imbalance Market transactions that will occur between each of the three participating balancing authorities via a dynamic tag, and (3) all other Energy Imbalance Market transactions (those that don't cross a balancing authority boundary) will not be tagged at

[22] Portland at 4-6.

[23] Transmittal Letter at 11-12.

all and thus will not be subject to WECC unscheduled flow procedures.[24] The ISO stresses that WECC's unscheduled flow procedures will apply to EIM Transfers between each of the three participating balancing authority areas in the same manner as they currently apply to dynamic schedules and to generation at locations within a balancing authority area.[25] Similarly, there is no reason why Energy Imbalance Market transactions that do not cross a balancing authority boundary should have any different impact on unscheduled flows than current transactions. If there are any questions in connection with the treatment of unscheduled flow procedures, they would be questions regarding the WECC procedures and tools, not the ISO's filing. In addition, the Energy Imbalance Market does not alter the e-Tagging requirements of participating balancing authorities, including PacifiCorp.

The ISO has also concluded an initiative to expand its full network model to more effectively balance the grid with external balancing authority areas and manage the impacts of unscheduled flows on the EIM Area, thereby improving reliability and market solution accuracy. This proposal was approved by the ISO Board of Governors at its meeting on February 6, 2014, and is expected to address these concerns from the perspective of the ISO.[26] The ISO expects to make its tariff amendment filing to implement this proposal in the near future.

Powerex notes that proposed section 29.7(j)(1)(A) provides the ISO with the authority to establish an administrative price in the real-time market in response to a

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[24] Tri-State at 5-7.

[25] This principle would also apply to additional balancing authority areas that may elect to join the Energy Imbalance Market.

[26] This was discussed in the ISO transmittal letter at p. 19 n.35.

disruption. Powerex complains that the provision contains no detail regarding the determination of the administrative price and states that the methodology by which rates will be set in this situation must be provided consistent with the Federal Power Act.[27] The methodology for the determination of the administrative price is set forth in ISO tariff section 7.7.4. The Commission has already found this methodology to be just and reasonable, and the ISO has provided a cross-reference to section 7.7.4 in section 29.7(j)(2)(D). It is not necessary to include additional cross-references, particularly when the reference already included is under the heading "CAISO Responses to EIM Disruption". The section referenced by Powerex simply sets forth the conditions, not the actions that may be taken. However, the ISO would be willing to include another cross reference as requested by Powerex if the Commission finds that appropriate and directs the ISO to do so on compliance.

Portland requests that the Commission require the ISO to develop mechanisms to guard against potential detrimental and unintended market and reliability impacts, including a requirement that the ISO provide a detailed description of transparent operations data so that stakeholders can assess the effectiveness of the Energy Imbalance Market. Section 29.7 already provides the ISO and the EIM Entities with the ability to take actions to address unintended market and reliability issues and the ISO and EIM Entities remain responsible for fulfilling all NERC and WECC reliability requirements. Similar provisions in the existing ISO tariff have proved sufficient to address unanticipated market and reliability impacts. No additional "mechanisms" are necessary. In addition, section 29.6 requires the ISO to provide data on the operation

[27] Powerex at 91-92.

of the Energy Imbalance Market on OASIS in the same manner as it currently provides data on the operation of existing ISO markets. This data, and the regular reports provided on the ISO website by the ISO, in addition to the Energy Imbalance Market metrics discussed further below, should be sufficient to allow assessment of market effectiveness.[28] Additional reporting requirements are therefore unnecessary and would be unduly burdensome and of limited value.

D. Metering

Section 29.10 addresses metering and data requirements for the Energy Imbalance Market. Powerex states that it is not possible to comply with the requirements of proposed section 29.10(e), which provides that an EIM Entity Scheduling Coordinator must provide the ISO, 20 minutes before the operating hour, information related to an EIM External Intertie bid that clears the fifteen-minute market. Powerex points out that this market will run every 15 minutes at 37.5 minutes prior to the start of a given 15-minute delivery interval, so that the required information will not be known at the time the submission is due.[29] The ISO has already addressed this timing through its compliance with Order No. 764.[30] Under the ISO Order No. 764 tariff revisions, which the Commission has accepted,[31] the ISO will update the energy profile of economically bid intertie transactions that clear the fifteen-minute market. By 20

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[28] ISO staff, the ISO Department of Market Monitoring, and the Market Surveillance Committee each review, analyze and report on market and operational conditions.

[29] *Id.* at 94-95.

[30] *Integration of Variable Energy Resources*, Order No. 764, FERC Stats. & Regs. ¶ 31,331, *order on reh'g*, Order No. 764-A, 141 FERC ¶ 61,232 (2012), *order on reh'g*, Order No. 764-B, 144 FERC ¶ 61,222 (2013) ("Order No. 764").

[31] *Cal. Indep. Sys. Operator Corp.,* 146 FERC ¶ 61,204 (2014).

minutes prior to the hour, the ISO will have completed the hourly fifteen-minute market process and communicated the results such that an EIM Entity will have the hourly information of transmission profile and the best information of 15-minute energy profile prior to the hour. This is the same process used within the ISO, which recognizes the tagging deadline of WECC for intertie transactions.

E. Creditworthiness, Dispute Resolution, and Legal Matters

Proposed section 29.22 provides additional miscellaneous provisions that parallel those applicable to market participants for transactions within the ISO balancing authority area. First, if the ISO incurs any tax liability as a result of the participation of EIM Market Participants in the real-time market (*e.g.,* as market operator or as central counterparty to transactions by EIM Market Participants), the ISO will pass those taxes on to the EIM Entity Scheduling Coordinator for the area where the transactions triggered the tax liability. Second, neither the ISO nor the EIM Entity will be a "Purchasing Selling Entity" for purposes of e-tagging of EIM Transfers.[32] Finally, title for energy in the real-time market passes directly from the entity that holds title when the energy enters the ISO 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 ISO controlled grid or the transmission system of an EIM Transmission Service Provider, whichever last precedes delivery to load.

[32] PacifiCorp as a transmission service provider or merchant may have independent requirements as a purchasing or selling entity, but such requirements would not be triggered by its function as an EIM Entity, which relates to its status as a balancing authority, as is provided in the ISO tariff.

Powerex contends that these provisions are inconsistent with the ISO's commitment to serve as the centralized counterparty to transactions. According to Powerex, the transmittal letter and proposed tariff make clear that the ISO is not willing to assume the actual obligations associated with this status, which include taking title to energy and the obligations attendant thereto, such as serving as the Purchasing Selling Entity and being the entity named as the sink on an e-Tag.[33]

The proposed provisions are identical in substance to provisions in the ISO's currently effective tariff for both the day-ahead and real-time market.[34] Accordingly, Powerex's argument is an improper collateral attack on the Commission's order that accepted existing provision Section 4.5.3.2.2.[35] The ISO's Order No. 741compliance filing highlighted Section 4.5.3.2.2 and explained in plain terms why the ISO would not be a part of the chain of title on delivery of energy.[36] The ISO explained that the purpose of this arrangement was to ensure that it could not become the Purchasing Selling Entity on an e-Tag, and therefore responsible for procuring emissions allowances under California law. The ISO was responding to the consensus view of its stakeholders that it should not be responsible for procuring emissions permits. There were two reasons for this: (1) it would result in additional costs that would have to be passed on to market participants; and (2) it would undermine the purposes of California

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[33] Powerex at 89-91. Note the ISO is not sure the reference to bankruptcy law was intended, and if so, is not clear how that is relevant.

[34] *See* ISO Tariff § 4.5.3.2.2 and ISO Transmittal Letter, Docket No. ER12-1856-000, filed May 25, 2012, ("Order 741 Compliance Transmittal") at p. 6.

[35] *See Cal. Indep. Sys. Operator Corp*., 140 FERC 61,169 (2012).

[36] *See* Order 741 Compliance Transmittal at p. 6..

state law concerning greenhouse gas emissions.[37] After being presented with those facts, the Commission approved Section 4.5.3.2.2 as complying with Order No. 741. Proposed section 29.22(b) and (c) provide that the same rule will apply to the Energy Imbalance Market, and should likewise be accepted by the Commission.[38]

F. Transmission System

The ISO proposes to operate the Energy Imbalance Market using capacity made available to it by transmission service providers within the balancing authority area of an EIM Entity (each an "EIM Transmission Service Provider"). In the transmittal letter, the ISO noted that PacifiCorp Energy, which holds transmission rights on facilities connecting the ISO and PacifiCorp, intends to make those rights available for EIM Transfers at no charge. Powerex asserts that the ISO has not demonstrated that PacifiCorp Energy's provision of this capacity is consistent with relevant requirements for such capacity release.[39]

This issue is beyond the scope of this proceeding.[40] The proposed amendment provides for the ISO to extend the operation of its real-time market to other balancing authority areas. It does not address the mechanics of its implementation with any particular balancing authority area. The mechanics by which EIM Transmission Service

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37 *Id.*

38 The Commodity Futures Trading Commission has also accepted that the ISO's existing structure, which includes not being part of the chain of title on delivery of energy, "will, in fact, provide [it] with enforceable rights of set off against any of its market participants." *See* Letter dated April 29, 2013, from Ananda Radhakrishnan (accepting the ISO's legal memorandum as in compliance with Paragraph 6(a) of the CFTC's Final Order, 78 Fed. Reg, 19880) (April 2, 2013).

39 Powerex at 87-89.

40 Indeed, the Energy Imbalance Market could operate without transfers between participating balancing authority areas.

Providers and other customers will provide capacity are to be determined by each EIM Transmission Service Provider, customer and the EIM Entity. Moreover, nothing in the proposed amendment would over-ride relevant tariffs and agreements. If an EIM Transmission Service Provider, EIM Entity or customer were to act contrary to its legal obligations, any party could seek redress from the Commission. Powerex's concern is thus not only beyond the scope of this proceeding, but also a red herring at this time.[41]

G. Market Operation

Proposed section 29.32 includes the market rules necessary to recognize that resources participating in the Energy Imbalance Market may incur costs to comply with California Air Resources Board greenhouse gas regulations if their resources are deemed to have been imported into the ISO balancing authority area. Several parties challenge the application of these provisions in the context of the Energy Imbalance Market. Proposed section 29.34 includes variations from requirements of sections 27, 30, and 34 of the ISO tariff that are necessary to permit seamless real-time participation in the Energy Imbalance Market, particularly because some resources do not participate in other ISO markets. Some parties also challenge portions of section 29.34.

1. The Proposed Greenhouse Gas Regulations Are Just and Reasonable.

As described in its transmittal letter, the ISO's proposed market rules recognize that EIM Participating Resource Scheduling Coordinators may incur costs to comply with the California Air Resources Board's Greenhouse Gas regulations if output from their participating resources support transfers into the ISO balancing authority area or

[41] PacifiCorp proposes that the capacity available for EIM Transfers not constitute a sale, transfer, or reassignment of transmission capacity, and that this issue may be more appropriately considered in its tariff filing. *See* Docket No. ER14-1578-000.

other balancing authority areas in California. The proposed rules permit EIM Participating Resource Scheduling Coordinators to submit a separate bid adder to recover such costs ("EIM Bid Adder"). In protests and comments, various parties raise concerns with the ISO's proposed rules.[42] While the ISO remains willing to supplement its proposed tariff language to clarify how it will use EIM Bid Adders in its market clearing processes, the Commission should reject arguments opposing the ISO's proposed EIM Bid Adder.

a. The Commission Should Reject Arguments that the ISO Is Imposing California's Greenhouse Gas Regulations on EIM Participants.

Powerex asks the Commission to reject the ISO's proposed tariff provisions that would establish an EIM Bid Adder. Powerex argues that the ISO's proposed tariff provisions would extend the regulatory authority of the California Air Resources Board to all EIM Market Participants and allow the ISO to assign responsibility to comply with California greenhouse gas regulations to entities that inadvertently or unknowingly import energy to serve load within California.[43]

The ISO's tariff provisions do no such thing. California's greenhouse gas regulations apply to first deliverers of electricity into the state of California on their own terms.[44] The ISO's proposed tariff provisions merely provide a means to account for

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[42] Powerex at 39-57; Seattle at 5-6; Portland at 9-10; Six Cities at 10; Tri-State 4-5; Chelan at 2-4; and Edison at 8-14.

[43] Powerex at 41-46; *see also* Seattle at 5-6.

[44] Title 17, California Code of Regulations Section 95800 *et seq*. Title 17 California Code of Regulations Section 95100 *et seq*. Tri-State's request that the Commission not allow the ISO to use its authority to expand the reach of a California regulation into other states, Tri-State at 4-5, is thus misplaced.

the impact of these already existing regulations in production costs resulting from the dispatch of participating resources in the EIM Area.

Under proposed section 29.32(b), the ISO will use EIM Bid Adders submitted by EIM Participating Resource Scheduling Coordinators to dispatch energy from resources outside the ISO's balancing authority for transfer into the ISO. Powerex asserts that scheduling coordinators in the ISO's existing markets know when they are importing electricity to California by virtue of the fact that they submit bids at the ISO's intertie scheduling points and then submit e-Tags when their bids are accepted. Scheduling coordinators then list themselves on the e-Tag as purchasing selling entities and the California Air Resources Board uses the e-Tag to identify the electricity importers that are first deliverers of electricity under its greenhouse gas regulations.[45] Powerex asserts that the ISO's proposal to determine which output from EIM Participating Resources supports an EIM Transfer into the ISO exposes these resources to the risk of California greenhouse gas compliance requirements without their affirmative determination to accept the requirements.[46]

Under the Energy Imbalance Market design, participation is voluntary. An EIM Participating Resource Scheduling Coordinator will submit bids knowing that if its resources are dispatched, a portion of the resources output may support a transfer into the ISO balancing authority area. The ISO market optimization will take the EIM Bid Adder into account in determining whether to dispatch an EIM Transfer into the ISO balancing authority area. When a net transfer occurs into the ISO balancing authority

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45 Title 17 California Code of Regulations Section 95802 (a) (85).

46 Powerex at 41-42.

area, the ISO's optimization will identify the most economic resources supporting the net transfer into the ISO balancing authority area. Instead of using e-Tags to implement its greenhouse gas regulation for EIM Transfers, the California Air Resources Board is modifying its regulations to use results from the ISO's Energy Imbalance Market optimization to identify electricity importers that are first deliverers of electricity. The California Air Resource Board's approach reflects an alternative mechanism to deem that output from certain resources supports an import into the ISO balancing authority area.

Powerex complains that California's greenhouse gas regulations impose substantial requirements on market participants and serve as a barrier to Energy Imbalance Market participation.[47] The ISO, however, has not observed a substantial decrease of import offers or import clearing in its markets due to greenhouse gas regulations. Indeed, market results indicate that in some of the months following imposition of the greenhouse gas regulations, imports increased compared to prior levels.[48]

Powerex asserts that alternative mechanisms could be developed to address this barrier, including allowing the ISO to insert bid adders for EIM Participating Resources and then manage greenhouse gas obligations on behalf of EIM Participating Resource Scheduling Coordinators.[49] As previously noted, however, the ISO tariff does

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47 Powerex at 44-46.

48 *See e.g.* Q1 2013 Report on Market Issues and Performance prepared by ISO's Department of Market Monitoring dated May 29, 2013 at 47-48 and Figure 3.4 Comparison of imports on inter-ties in 2012 and 2013.

49 *See* Powerex at 46 and Attachment B thereto, Statement of William Hogan at 4 suggesting it would be preferable for the ISO to assume and dispose of carbon obligations of

not determine the compliance requirements associated with California's greenhouse gas regulations. This is the role of the California Air Resources Board. Powerex's alternative is not the approach the California Air Resource Board has proposed to adopt in its regulations or the approach the ISO has proposed in its tariff filing. Instead, the California Air Resources Board has proposed to amend its greenhouse gas regulations to expand the definition of *Electricity Importers* to include EIM Participating Resource Scheduling Coordinators serving the Energy Imbalance Market whose transactions result in electricity imports into California.[50] The California Air Resources Board has also proposed to amend its regulation to modify its definition of *imported electricity* to include Energy Imbalance Market dispatches designated by the ISO's optimization model and reported by the ISO to EIM Participating Resource Scheduling Coordinators.[51] When incorporated into California greenhouse gas regulations, these provisions will apply of their own force. Thus, the Commission need only assess the ISO's proposal; it need not assess the justness and reasonableness of an alternative proposal.[52] Stated differently, the ISO's proposal does not need to be the best option, it only needs to be just and reasonable.[53] Powerex offers no evidence to demonstrate that the ISO's proposal is unjust and unreasonable.

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imports so that market participants outside of the ISO would not need to interact directly with the California Air Resource Board.

[50] Proposed amendments to Title 17 California Code of Regulations Section 95802 (a)(114) available at http://www.arb.ca.gov/regact/2013/capandtrade13/capandtrade13isorappe.pdf

[51] Proposed amendments to Title 17 California Code of Regulations Section 95802 (a)(179) available at http://www.arb.ca.gov/regact/2013/capandtrade13/capandtrade13isorappe.pdf

[52] *See e.g. Cal. Indep. Sys. Operator, Corp.*, 128 FERC ¶ 61,282, at P 31 (2009).

[53] *Id.*

b. Alternatives Exist for Resources that Want To Participate in the Energy Imbalance Market but Do Not Want To Be Subject to California's Greenhouse Gas Regulations.

Some parties express concerns about accepting responsibility for compliance with greenhouse gas requirements. Chelan complains that the ISO will not serve as a first deliverer of electricity into its balancing authority area under the Energy Imbalance Market and thereby take responsibility for California's greenhouse gas regulations.[54] Tri-State asks whether EIM Participating Resources will be required to register with the California Air Resources Board as covered entities on the chance that the resource may dispatched to support an import into California even if it submits a very high bid adder.[55]

Out-of-state resources that wish to sell into California face responsibility for compliance with greenhouse gas requirements. This is no change from existing law. Importantly, as in the ISO's current market, there is a mechanism for a participating resource to insulate itself from California's greenhouse gas regulations. In the context of the Energy Imbalance Market, California's regulations will apply to EIM Participating Resource Scheduling Coordinators. Energy Imbalance Market resource owners may thus contract with an EIM Participating Resource Scheduling Coordinator to manage any risk associated with complying with California greenhouse gas regulations.

Tri-State is correct that although EIM Participating Resource Scheduling Coordinators may submit high EIM Bid Adders that will likely make their resources uneconomic for dispatch to support a transfer into the ISO balancing authority area, there are circumstances under which an EIM Participating Resource with a high EIM Bid

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[54] Chelan at 2-4.

[55] Tri-State at 4-5.

Adder could still be dispatched to support a transfer into the ISO pursuant to the ISO's proposed tariff provisions. The ISO acknowledges Tri-State's request for a mechanism to avoid being dispatched to support an import to the ISO, but the ISO believes such a proposal requires additional discussion with stakeholders.[56] Consistent with the ISO's Board of Directors' authorization to seek the Commission's approval of the Energy Imbalance Market design, the ISO commits to examining whether to incorporate such a mechanism in a future revision to its Energy Imbalance Market design and, if so, under what conditions.[57]

EIM Participating Resources are, of course, free not to participate in the market at any time; it is purely voluntary whether they bid. However, the ISO encourages as much participation as possible. When entities are unwilling or unable to sell to their output to the ISO, the overall benefits to those who have joined the Energy Imbalance Market diminish.

c. The ISO's Proposed Structure of the EIM Bid Adder Treats Participating EIM Participating Resources in the Same Manner as Resources in the ISO Market.

Proposed section 29.32(a)(2) allows EIM Participating Resource Scheduling Coordinators to submit a separate bid component to recover costs of compliance with the California Air Resources Board greenhouse gas regulations. The only limitations the ISO proposes for EIM Bid Adders are that (1) the sum of this bid adder and the

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[56] *See e.g.* Edison at 9-10 (arguing that any such mechanism should only be available to entities that are legally precluded from participating in California's greenhouse gas program). *See also* Portland at 9-10 (advocating that the ISO should implement the use of a flag to prevent the dispatch of EIM resources to meet ISO load, if the EIM resource so elects).

[57] *See* Memorandum from Petar Ristanovic to ISO Board of Governors dated October 31, 2013 at 8-9.

energy component of the bid cannot exceed $1,000 MWh; (2) bid adders may not be less than $0/MWh; and (3) EIM Participating Resource Scheduling Coordinators may only submit one bid adder per day for an EIM Participating Resource.[58] The proposed EIM Bid Adder will allow the ISO to assess the most economic EIM Participating Resources to support transfers into the ISO balancing authority area.

Edison raises concerns that the ISO's proposed EIM Bid Adder permits EIM Participating Resources to sell their output at one price to load in EIM Entity balancing authority areas and at a higher price to load in the ISO balancing authority area. Edison complains that the bid adder is unmitigated and will permit undue price discrimination against load within California. Edison recommends that the Commission only allow EIM Participating Resources to submit bids with verifiable California Air Resources Board greenhouse gas compliance costs and limit payments for the EIM Bid Adder to between zero and 150 percent of the estimated greenhouse gas compliance costs for each generator.[59] Six Cities also argue that the ISO's proposed EIM Bid Adder could result in over-recovery of greenhouse gas regulation compliance costs. Six Cities recommends that the Commission direct the ISO to limit the EIM Bid Adder to a reasonable proxy for greenhouse gas compliance costs (e.g. 150 percent of an index based on recently published prices for greenhouse gas compliance certificates).[60]

The ISO believes that it is just and reasonable to permit EIM Participating Resource Scheduling Coordinators to estimate their own compliance costs. Further, it

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58 See proposed § 29.32(a)(3)-(5).

59 Edison at 8-14.

60 Six Cities at 10.

is consistent with current ISO bidding and mitigation rules for resources that seek to import power into the ISO. As previously explained, to the extent that an EIM Participating Resource Scheduling Coordinator submits a high EIM Bid Adder, the ISO will look to more economical bids in its fifteen-minute market either from imports or from internal resources. The ISO's proposal treats EIM Participating Resources the same as these other resources by allowing them to submit bids up to the maximum energy bid price. To the extent that an EIM Participating Resource Scheduling Coordinator submits a high EIM Bid Adder in an attempt to avoid a dispatch to serve California, that is an acceptable practice. Under the ISO's current market, non-resource adequacy resources have no requirement to submit import bids.

Edison argues that any EIM Participating Resource Scheduling Coordinator could use the EIM Bid Adder irrespective of whether it has a California greenhouse gas obligation and that the Energy Imbalance Market should only allow EIM Participating Resources with verifiable greenhouse gas compliance costs to submit an EIM Bid Adder. Edison suggests that a hydroelectric resource could use the EIM Bid Adder to effect undue price discrimination as between the ISO and EIM Entity balancing authority areas.[61] Edison's argument ignores the fact the California greenhouse gas regulations involve more than simply securing and surrendering cap and trade compliance instruments. Even if an EIM Participating Resource Scheduling Coordinator submits a bid that results in an EIM Transfer into the ISO from a resource that does not emit greenhouse gas, California regulations may still require the EIM Participating Resource Scheduling Coordinator to register and submit information to the California Air Resource

[61] Edison at 8-9.

Board in connection with imports into the ISO balancing authority area. The EIM Bid Adder will permit recovery of any costs incurred to develop and administer such a reporting program.

Edison provides an example in which an EIM Participating Resource Scheduling Coordinator offers the output of an EIM resource to the EIM Entity at one price and to the ISO balancing authority at a higher price.[62] Edison asserts this situation creates undue price discrimination but cites no authority for this proposition. The fact that an EIM Participating Resource Scheduling Coordinator may offer an energy bid at one price to load in the Energy Imbalance Market and at another, higher price to load in the ISO balancing authority area simply reflects the optionality that exists in the ISO's current market and the different circumstances that exist in different markets. There is no undue price discrimination under such circumstances. A scheduling coordinator submitting a bid at an ISO intertie scheduling point will price the cost to comply with California's greenhouse gas regulations into its bid. That same scheduling coordinator might offer energy supply at a western trading hub outside of the ISO at a lower price. This reality reflects the economics of selling power into the ISO balancing authority area.

Edison also asserts that when prices are lower in the ISO balancing authority area but higher in the EIM Entity balancing authority Area, load of the EIM Entities will receive an undue benefit. This situation, however, does not reflect an unfair advantage associated with greenhouse gas regulations but simply the operation of the Energy Imbalance Market itself. Based on system conditions and production costs, it may at

[62] Edison at 11-12.

times be more economical to dispatch resources within the ISO to serve load in EIM Entity balancing authority areas. This is one of the fundamental objectives of the Energy Imbalance Market, *i.e.*, to achieve a more economic dispatch of resources across a larger area. Resources within the ISO will receive payment for their output used to serve the load, and the EIM Entity will allocate the costs for that supply pursuant to its open access transmission tariff.

Edison's recommendation that payments for the bid adder must be between zero and 150 percent of the estimated greenhouse gas compliance costs for each EIM Participating Resource is impractical and would over-mitigate Energy Imbalance Market bids in a manner that is not consistent with current ISO market rules for imports. The ISO's proposed EIM Bid Adder will both help identify the most economic EIM Participating Resources to serve load in the ISO balancing authority and provide EIM Participating Resource Scheduling Coordinators with the greatest amount of flexibility to estimate the costs of complying with California's greenhouse gas regulations, including the legal and regulatory risks associated with those regulations. The ISO emphasizes that the California Air Resources Board establishes resources' emissions rates after the end of each calendar year. The conversion of this rate to a rate per MWh depends on the unit's average output level throughout the year, which is difficult for the EIM Participating Resource Scheduling Coordinators to predict. The ISO's design provides more flexibility to the EIM Participating Resource Scheduling Coordinators to manage this uncertainty in connection with their greenhouse gas compliance costs. Edison's proposal, moreover, fails to identify the components of greenhouse gas compliance costs to include in any formula.

Likewise, Six Cities' proposal only accounts for a percentage of the cost of greenhouse gas compliance instruments and may not reflect the actual costs and attendant risks of complying with California greenhouse gas regulations. Edison's argument that the ISO's proposal allows for unmitigated bids is incorrect. Edison itself acknowledges that the ISO's proposed tariff rules prohibit an EIM Participating Resource Scheduling Coordinator from submitting more than one EIM Bid Adder per day for an EIM Participating Resource. The EIM Bid Adder remains subject to the maximum bid price when combined with the energy portion of an Energy Imbalance Market bid. Currently, the maximum bid price in the ISO's markets is $1,000 MWh.[63] Scheduling coordinators submitting bids at the ISO's intertie scheduling points do not face any additional bid mitigation apart from this maximum bid price. Likewise, an Energy Imbalance Market bid may not exceed $1,000 MWh. Bids with high EIM Bid Adders or high energy components will only clear the real-time market in the ISO balancing authority area when those bids are necessary to serve load within the ISO balancing authority area. Powerex suggests that this structure undermines economic efficiency and endorses economic withholding by EIM Participating Resource Scheduling Coordinators to avoid being subject to the jurisdiction of the California Air Resource Board.[64] There is no requirement under the Energy Imbalance Market to submit a bid to serve load within the ISO balancing authority area, and EIM Participating

63 *See* ISO tariff § 39.6.1.1.

64 Powerex at 47 and Attachment B thereto, Prepared Statement of William Hogan at 4-5.

Resources do not exercise market power by submitting a high EIM Bid Adder to avoid serving that load.[65]

d. The Commission Should Not Make Any Payments for Greenhouse Gas Compliance Costs Subject to Refund.

In its comments, Edison argues that payments for the EIM Bid Adder should be subject to refund because it is unclear whether the California Air Resources Board has authority to regulate power imported into the ISO balancing authority area from EIM Participating Resources.[66] Edison asserts that some EIM Participating Resources may not be required to comply with California's greenhouse gas regulations and that, if such a determination were made after these resources were compensated for greenhouse compliance costs, then such resources might receive windfall profits. Edison's argument ignores the fact that resources external to the ISO have been submitting import bids into the ISO market that reflect the greenhouse gas compliance costs since greenhouse gas compliance requirements went into effect. Indeed, the ISO's Department of Market Monitoring has identified California greenhouse gas regulations as one reason for increases in wholesale energy prices.[67] Payments to scheduling coordinators in connection with these imports are not subject to refund because of the risk that a Court may determine that California greenhouse gas regulations do not apply

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[65] The current ISO markets and the proposed Energy Imbalance Market mitigate for local market power conditions where there are non-competitive transmission constraints between supply resources and loads. Non-competitive transmission constraints in EIM Entities' balancing authority areas may prevent EIM Participating Resources from being dispatched to serve load within California, but such a constraint would not cause an EIM Participating Resource to be dispatched to serve California load, and no greenhouse gas obligation would be incurred by an EIM Participating Resource that is dispatched to serve load outside California.

[66] Edison at 13.

[67] *See e.g.* Q4 2013 Report on Market Issues and Performance prepared by ISO Department of Market Monitoring dated February 10, 2014 at 60-63.

to external resources importing into the ISO balancing authority area. Likewise, payments made to EIM Participating Resource Scheduling Coordinators should not be subject to refund. It would be unduly discriminatory to make some import bids subject to refund with respect to greenhouse gas compliance costs, but other import bids not subject to refund. Until such time, if ever, that a court concludes that California's greenhouse gas regulations do not apply to EIM Participating Resource Scheduling Coordinators, these entities will need to incur compliance costs in order to serve load in California. Edison provides no explanation of how EIM Participating Resources would recover these sunk costs in the event that a court were to determine California's regulations do not ultimately apply.[68] Edison's proposal would create a definite and possibly unacceptable financial risk for EIM participants beyond the uncertainty that exists as a result of legal challenges to California's greenhouse gas regulations.

e. The ISO Does Not Object To Adding Tariff Language Explaining How It Will Use EIM Bid Adders in Its Market Clearing Processes, if The Commission Deems It Advisable.

In its comments, Powerex asks that the ISO augment its proposed tariff provisions to explain how the ISO will use EIM Bid Adders in dispatch, market clearing and determinations as to whether output from a specific resource supports an EIM Transfer into the ISO balancing authority area.[69] Powerex argues the Commission should apply its rule of reason and require the ISO to include more information about these topics in its tariff. In support of its argument, Powerex compares proposed

[68] The ISO takes no position here with respect to how any court order concluding that California's greenhouse gas regulations do not apply to EIM Participating Resource Scheduling Coordinators might be implemented.

[69] Powerex at 47-49.

section 29.32 to the description of location marginal price calculations in Appendix C of the ISO tariff. Powerex argues that it is appropriate to include this level of detail in the Energy Imbalance Market tariff.

Powerex fails to recognize that the ISO will continue to rely on Appendix C of its tariff to calculate locational marginal prices to the extent those provisions are not otherwise limited in their applicability or inconsistent with the Energy Imbalance Market tariff provisions in proposed section 29.[70] Accordingly, there is no reason to repeat Appendix C in the Energy Imbalance Market tariff. The ISO is, however, willing to add additional description to its tariff relating to the use of an EIM Bid Adder if the Commission so directs.

f. The Proposed EIM Bid Adder Tariff Provisions Do Not Create an Undue Preference for or Discriminate Against EIM Participating Resources.

In its comments, Powerex argues that the dispatch and pricing process described by CAISO is tantamount to selecting for California delivery those EIM resources with the lowest emissions. Through an elaborate example, Powerex asserts that the ISO's implementation of dispatch algorithms to choose lowest emissions resources in the EIM dispatch for "deemed" delivery to California would have a discriminatory effect by granting unduly preferential rates to generators selling into the Energy Imbalance Market relative to those "selling directly" to the ISO.[71]

Powerex fails to acknowledge that the ISO's optimization will dispatch the most economic resources, not those with the lowest emission costs, to support imports in the

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70 *See* proposed § 29.1.

71 Powerex at 49-55.

ISO. The fact that those resources may have a low EIM Bid Adder does not create undue preferences. A lower emitting resource may be a more economic resource and, therefore, will be selected by the ISO's dispatch process. Powerex's example posits how a resource may bid either into the ISO's market as an importer or into the Energy Imbalance Market. If the scheduling coordinator for the resource bids into the ISO market as an importer, it receives the market clearing price, but also incurs a greenhouse gas cost associated with its schedule. If the EIM Participating Resource Scheduling Coordinator for the resource bids into the real-time market and clears the market, it receives the market clearing price, but may not face a greenhouse gas cost if other less expensive EIM Participating Resources are dispatched to support a transfer. Powerex assumes that these less expensive resources will have lower emissions. That assumption does not necessarily follow. An EIM Participating Resource bid will have both energy and bid adder components. The bid adder component is only one factor in determining whether a resource is the most economic. The ISO will consider both components together in making economic dispatches for EIM Participating Resources to serve load in California. That the ISO will consider emissions costs is no more discriminatory than the fact that the ISO will consider energy bids, in which resources with low fuel costs have an inherent advantage.

g. The ISO's Proposed Tariff Rules Do Not Raise Any New Constitutional Issues Concerning California's Greenhouse Gas Regulations.

Powerex notes that importers of power into the ISO balancing authority will face regulation under California greenhouse gas regulations and asserts in a conclusory manner that this raises constitutional issues; however, Powerex does not brief these

issues.[72] Powerex merely states that these issues exist if California extends its greenhouse gas regulation to EIM Participating Resource Scheduling Coordinators. Powerex ignores that these same issues already exist today for scheduling coordinators that import power into the ISO balancing authority area, and the ISO's Energy Imbalance Market proposal does not create any new issues in this regard. Again, participation in the Energy Imbalance Market is entirely voluntary, and all participating resource scheduling coordinators know before submitting a bid that output from its resource may result in an import to the ISO.

h. The Proposal Allows Other Balancing Authorities Located in California To Participate in the Energy Imbalance Market.

In its comments, PacifiCorp seeks confirmation of its understanding of proposed Section 29.32 of the ISO Tariff and its applicability to the PacifiCorp EIM Entity. PacifiCorp notes that Section 29.32 sets forth provisions affecting energy that is deemed to be imported into "the ISO Balancing Authority Area or other EIM Entity Balancing Authority Areas in California."[73] PacifiCorp's understanding is that the PacifiCorp EIM Entity would not be considered an "EIM Entity Balancing Authority Area in California" and therefore would not be subject to the greenhouse gas obligations applied to such EIM Entity balancing authority areas in California under proposed Section 29.32 of the ISO Tariff. PacifiCorp is correct. The ISO has drafted section 29.32 to allow for EIM participation by other balancing authority areas located in California; it does not apply to PacifiCorp's California service territory as PacifiCorp is

[72] Powerex at 54-55.

[73] PacifiCorp at 12.

not located in California despite the fact a small portion of its balancing authority area is located in California.

i. The ISO's Tariff Rules Governing Notice and Reporting Requirements When EIM Participating Resources Are Dispatched To Support an Import into the ISO Balancing Authority Are Internally Consistent.

In its comments, Powerex asserts that Subsections 29.32(d) and (f) may be inconsistent with each other.[74] In section 29.32(d), the proposed tariff states that the scheduling coordinator will be made aware with its dispatch instruction if its bid is deemed to be imported into ISO, while in section 29.3(f), the proposed tariff provides that energy deemed imported to the ISO will be provided "as part of the Real-Time Market results publication."

These provisions are not inconsistent. The first provision explains that the EIM Participating Resource Scheduling Coordinator will receive a dispatch instruction associated with EIM Participating Resources dispatched to support an import to the ISO; the second provision provides that the EIM Participating Resource Scheduling Coordinator will receive a market results report of the fifteen-minute and five-minute markets.

2. The Proposed Resource Sufficiency Tests Adequately Ensure the Sufficiency of Energy to Service Load and Protect Against Leaning.

A number of parties challenge the adequacy of the ISO's proposed procedures for ensuring that each balancing authority area in the Energy Imbalance Market has sufficient energy and ramping capability to service its load. Powerex contends the

[74] Powerex at 93.

resource sufficiency framework must be applied both in day-ahead and in 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. According to Powerex, the weakness of the proposed Energy Imbalance Market resource sufficiency test is ultimately that it will be conducted from a forecasted energy perspective only, not from a capacity perspective.[75]

CMUA complains about the lack of symmetry regarding forward market processes and resource sufficiency rules between the EIM Entity and the ISO balancing authority, which it asserts can cause disruption or inequitable leaning on California resources.[76] Six Cities also contend that the proposal does not address concerns about potential capacity leaning.[77]

These concerns are misplaced. The ISO is only proposing an expansion of its real-time market. That market does not incorporate a forward capacity requirement, and the ISO does not believe it is appropriate in its proposal to attempt to impose forward capacity requirements on Energy Imbalance Market participants. Instead, the ISO is proposing robust scheduling and bidding requirements appropriate for a real-time market to ensure the availability and adequacy of energy. These requirements include (1) balanced supply and demand in EIM Entities' EIM Base Schedules, (2) feasibility of EIM Base Schedules (*i.e*,, deliverable within resources' operational capability and

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[75] Powerex at 64-67. *See also* Chelan at 4-5.

[76] CMUA at 8. It is worth nothing that there are no restrictions on exporting in the existing real-time market. The ISO can only curtail exports when necessary to serve ISO load. Similarly, under the Energy Imbalance Market, the ISO will not export if that would interfere with serving ISO load. In comparison to the current market, however, the ISO will be able to draw upon resources in the EIM Entity balancing authority areas when necessary to serve load.

[77] Six Cities at 6-10.

without unresolved congestion), and (3) flexible ramping capacity requirements. The proposal protects EIM Entity balancing authority areas from real-time leaning on other balancing authority areas, including the ISO balancing authority area, by isolating any EIM Entity balancing authority area that fails to meet these requirements from accessing the resources available in other balancing authority areas in the EIM Area. The ISO believes that these tools are sufficient and should be tested prior to the imposition of additional requirements.

Powerex disagrees. It contends that these measures are inadequate and will lead to some Energy Imbalance Market participants opting out of capacity commitment processes in their source balancing authority, in order to consume capacity at no charge as provided by the broader Energy Imbalance Market footprint.[78]. Chelan agrees with Powerex in this regard.[79] Powerex first asserts that the ISO has failed to adopt penalties for significantly over- and under-scheduling generation.[80] The ISO discusses this contention below in connection with cost allocation.

Second, Powerex asserts that the ISO has failed to implement adequate measures to assess the sufficiency of available resources or the resources' actual ability to perform consistent with their base schedules and energy bids.[81] To the contrary, under section 29.4, EIM Entity Scheduling Coordinators and EIM Participating Resource Scheduling Coordinators must register their resources with the ISO. This will provide the ISO with the necessary resource operating characteristics. The EIM Entity

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78 Powerex at 57.

79 Chelan at 4-5.

80 Powerex at 60-64.

81 Powerex at 64-67.

must also inform the ISO regarding planned and forced outages under section 29.9. The ISO will commit units sufficiently in advance to accommodate their ramping requirements. It is unclear what additional information Powerex considers necessary. After the fact, the ISO will know the degree to which resources fulfilled their obligations, and will take this into account in determining flexible ramping requirements in future intervals.

Third, Powerex contends that the flexible ramping obligation and resource sufficiency tests that have been proposed are inadequate to preclude leaning on the Energy Imbalance Market instead of acquiring sufficient resources in advance.[82] Specifically, Powerex argues that the filing does not provide sufficient detail on the determination of flexible ramping requirements and simultaneously contends that the ISO is excluding important considerations. Powerex refers to Mr. Tretheway's declaration in which he states that the requirement will be "based on demand forecast change across consecutive intervals, demand forecast error, and energy production variability," using ISO forecasts of demand and variable energy resource generation as inputs to the calculation. Powerex notes that although the ISO will consider both "demand forecast change" and "demand forecast error," these terms refer to the CAISO's forecast of demand, while base schedules may specify an entirely different level of demand. For example, according to Powerex, the ISO's forecast may be for 1,000 MW, with an estimated +/- 25 MW range, but this does not protect against the EIM Entity scheduling only 800 MW of demand.[83]

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82 Powerex at 67, 70.

83 Powerex at 67-68.

The flexible ramping capacity requirement is not intended to deal with under-scheduling of demand. Section 29.11 provides sufficient penalties for under-scheduling that will serve as a deterrent. The flexible ramping capacity requirement serves to ensure sufficient flexible capacity is available to serve the ISO demand forecast, considering additional uncertainty and variability, not the EIM Entity's demand forecast. In Powerex's example, the EIM Entity would need sufficient bids to serve 1025 MW of demand.

Next, Powerex asserts that "energy production variability" appears to be based only on variability surrounding the ISO's forecast of variable energy resource output, which may not bear any resemblance to the resources contained in the resource schedules. But energy production variability is just that—variability in output. Powerex's interpretation of Mr. Tretheway's statement is strained. Mr. Tretheway's reference to the use of ISO forecasts was in connection with the consideration of forecasts, not production. Powerex's contention that the flexible capacity requirement appears to ignore the failure of imports to be delivered in real-time[84] suffers from the same error. This circumstance is considered in connection with production variability and will increase the flexible ramping constraint requirement if included in the base schedule.

Powerex also asserts that that the need for flexible capacity will depend on the specific resources in the EIM Entity's resource plan and that historical trends of the observed need for flexible capacity will be a poor guide.[85] The ISO has never stated

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84 *Id.* at 68.

85 *Id.* at 69.

that it will restrict itself to historical data of the observed need for flexible capacity. In fact, the ISO's analysis will take into account resource types and ongoing empirical data from operation of the Energy Imbalance Market regarding the performance of these types of resources.

Powerex further contends that the proposed resource sufficiency framework will not prevent the ISO from leaning on EIM Entities. It complains that the ISO does not propose to apply those same resource sufficiency requirements within the ISO balancing authority. Powerex contends that the ISO presumes that it will ensure resource sufficiency within the ISO balancing authority area through its existing day-ahead residual unit commitment processes and that the ISO has not demonstrated how this will not result in the ISO "leaning" on the EIM Entities in the future.[86]

Powerex's facts are wrong. The California Public Utility Commission ensures resource sufficiency through a robust resource adequacy requirement, under which utilities must demonstrate sufficient capacity to service 115% of forecast load. The ISO backstops that program for noncompliance and for any failure of any non-CPUC jurisdictional load serving entities to provide sufficient capacity. The ISO also enforces a local resource capacity requirement.[87] The ISO's residual unit commitment procedures require that those resources receiving awards participate in the real-time market. The real-time unit commitment procedure simply ensures that this capacity is online when needed. The ISO does not need the resource sufficiency provisions of the

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[86] Powerex at 70-71.

[87] The ISO Board has recently approved a flexible capacity resource adequacy requirement to address the increase in variable energy resources. Relevant documents regarding the Flexible Capacity Resource Adequacy Must Offer Obligation are available via this link to the ISO website.

Energy Imbalance Market for its balancing authority area because the requirements the ISO already has in place exceed those applicable to Energy Imbalance Market. Rather, the ISO must ensure other balancing authority areas have sufficient resources because the ISO cannot rely upon the resource adequacy requirements in other EIM Entity balancing authority areas in the same manner as it does with respect to the ISO balancing authority area. The ISO tariff simply does not provide such authority in the context of the Energy Imbalance Market.

Iberdrola Renewables believes it may be appropriate to implement some level of scheduling accuracy requirements for variable energy resources. It notes that the ISO proposed one such requirement for imported variable energy resources as part of its new Order No. 764 market implementation, and it believes a similar metric could be added to the Energy Imbalance Market design to ensure responsible behavior and further mitigate concern regarding inappropriate capacity leaning on the system.[88] The ISO believes its proposed resource sufficiency requirements are appropriate and sufficient for the real-time timeframe in which the Energy Imbalance Market will operate, but the ISO may consider implementing additional measures in the future if actual experience suggests they are necessary.

3. Powerex's Suggested Revisions to Section 29.34 Are Inappropriate.

Powerex notes that proposed Section 29.34(q) states, "The ISO shall treat Variable Energy Resources in accordance with Section 34." Powerex contends that this reference is overly broad because it is unclear what particular provisions of Section 34

[88] Iberdrola Renewables at 5-6. The Commission rejected that proposal in its order on the ISO's filing. *See Cal. Indep. Sys. Operator Corp.,* 146 FERC ¶ 61,204 at PP 20-24, 63.

are relevant to the treatment of variable energy resources, as distinct from all other types of resources.[89]

Section 34 of the ISO tariff governs operation of the real-time market. Some of its provisions are applicable only to variable energy resources. The vast majority, however, are applicable to all resources, including variable energy resources. To attempt to identify in section 29 every provision applicable to variable energy resources would serve no purpose and would risk the omission of relevant provisions.

Powerex also notes that proposed Section 29.34(i)(2) states, "An EIM Participating Resource Scheduling Coordinator may bid a transaction at an EIM External Intertie into the FMM if both Balancing Authority Areas support 15- minute scheduling[90] at the EIM External Intertie under FERC Order No. 764." Powerex contends that the reference to "both Balancing Authority Areas" is vague, as it is unclear which two specific balancing authority areas must support 15-minute scheduling.[91]

The ISO disagrees. An EIM External Intertie is defined as "A point of interconnection between an EIM Entity Balancing Authority Area and an interconnected Balancing Authority Area other than a Balancing Authority Area in the EIM Area." Plainly, these are the two balancing authority areas to which the section refers.

Powerex also asserts that the adoption of 15-minute scheduling by a balancing authority does not necessarily mean that the relevant transmission providers or the path operator for a given intertie will also support 15-minute bidding. Powerex is correct.

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89 Powerex at 93-94.

90 Powerex incorrectly describes this as a matter of scheduling on the EIM Entity interties, when it is in fact economic bidding on those interties.

91 Powerex at 94.

The reference should be to "15-minute economic participation." The ISO requests that the Commission direct it to make this change on compliance.

4. PG&E Correctly Notes that the ISO Has No Relationship with Non-participants Regardless of the Base Schedule Aggregation Process.

PG&E recommends the ISO include additional language in Section 29.34(f)(4) to state explicitly that the scheduling coordinator for the EIM Entity will remain responsible for communicating with resources in the balancing authority area it represents and for communicating base schedules to the ISO as well as making changes to the base schedules as needed.[92] The ISO does not believe any clarification is required. There is no contractual, tariff, or other relationship between the ISO and non-participants—they remain customers of the EIM Entity. In addition, the proposed tariff amendments explicitly state that the EIM Entity is responsible for submission of the base schedules and other actions on behalf of their customers. Nonetheless, the ISO would be willing to include a clarification on compliance to address PG&E's concern, if the Commission deems it appropriate.

H. Cost Allocation

1. The Proposal Does Not Exempt EIM Transfers from Uplift Charges

Powerex also asserts that the ISO is providing "EIM exports" an advantage over "non-EIM exports" because it is excluding EIM Transfers from paying uplift costs. Powerex points to the fact that the uplift charges for the ISO balancing authority area are allocated according to measured demand, which includes ISO metered demand plus real-time interchange export schedules, and that the definition of real-time

[92] PG&E at p. 6-7.

interchange export schedules excludes EIM Transfers. Powerex asserts that there is no justification for such an exemption.[93]

Powerex's assertion that EIM Transfers will not pay a fair share of uplift charges is simply wrong.[94] Proposed sections 11.5.4.1 and 11.8.6.3.2 apportion the real-time imbalance energy offset and bid cost recovery costs between balancing authority areas according to the amount attributable to each. Proposed section 11.5.4.1.1 does not apportion charges, but isolates the real-time congestion offset charges attributable to each balancing authority area. Energy Imbalance Market uplift costs attributable to EIM Transfers into the ISO are allocated to the ISO. Energy Imbalance Market uplifts attributable to EIM Transfers into other balancing authority areas, which would include the "EIM exports" to which Powerex refers, are allocated to EIM Entity balancing authority areas.[95] Including EIM Transfers out of the ISO balancing authority—the "EIM exports"—as a component of "CAISO Measured Demand," to which the ISO allocates uplift costs attributable to EIM Transfers into the ISO, would result in an inappropriate double charge of such transfers, *i.e.*, both balancing authority areas would pay the uplifts associated with the charge.

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93 *Id.* at 26-27.

94 Powerex misstates the definition of EIM Measured Demand, which is "The metered CAISO Demand and metered EIM Demand plus Real-Time Interchange Export Schedules, excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management and EIM Transfers out of an EIM Entity Balancing Authority Area." The definition that Powerex quotes is the definition of "CAISO Measured Demand."

95 The proposed tariff does not dictate how EIM Entities are to allocate uplift charges assigned to their balancing authority areas.

2. Over- and Under-Scheduling Charges for Supply Are Not Necessary.

Section 29.11(d) provides penalties for over- and under-scheduling. Powerex notes that the ISO's proposal only penalizes over- or under-scheduling of demand and not of generation and asserts that this is problematic. The ISO explained 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 result in demand-based penalties. Powerex nonetheless points to the potential for EIM Entities to submit an artificially balanced schedule and then deliver less generation than scheduled without penalty.[96]

Powerex misunderstands the purpose of the penalties, which is to provide an incentive for accurate demand schedules, which the ISO must use for settling imbalance energy. In the ISO balancing authority area, the ISO accomplishes this through day-ahead schedules, and relies upon that market to provide the appropriate incentives. There are no over- or under-scheduling penalties in the existing ISO markets. Similarly, outside the ISO balancing authority area, the Energy Imbalance Market exempts from penalties EIM Entities that use the ISO's demand forecast if the base schedule resources sum within one percent of the ISO's demand forecast. Penalties outside of that band are a necessary incentive for accurate base schedules only for EIM Entities using their own forecast.

EIM Entities that do not deliver scheduled energy will pay the imbalance energy charges. As discussed above, the Energy Imbalance Market design prevents leaning

[96] Powerex at 60-64.

through the flexible ramping capacity requirement. As discussed above in connection with the failure of a resource to deliver scheduled energy, the ISO will consider production variability as empirical data. As a result, the ISO will increase the requirement in the event of persistent over-scheduling of generation.

3. EIM Entities Should Determine the Allocation of Uplift Costs Within Their Balancing Authority Areas.

Under proposed section 29.11(g), an EIM Entity determines how to allocate the flexible ramping constraint costs allocated to it. Edison argues that allowing the EIM Entity to develop a different allocation method creates several problems. As an example, Edison notes that PacifiCorp proposes to allocate this cost entirely to measured demand. Edison contends this is improper. Edison contends that similar treatment within the current ISO markets helps ensure consistent incentives for all market participants, reduces the likelihood of unintended consequences, and limits parties' ability to exploit different rules sets within the same market.[97]

The EIM Entity, not the load in the balancing authority area, is the Market Participant. The ISO's proposal apportions flexible ramping constraint costs to all EIM Entities in the same manner. The ISO does not believe that it is appropriate, absent design considerations or inconsistency with the ISO tariff, for the ISO to specify how the EIM Entity allocates these charges to load in its area. If Edison or another party believes that PacifiCorp's (or another EIM Entity's) proposed allocation is not just and reasonable, it should raise the matter in PacifiCorp's (or the other EIM Entity's) tariff filing. It is beyond the scope of the instant ISO tariff amendment. In any event, there is

[97] Edison, Appendix B at 2-3.

no reason to require a uniform cost allocation methodology for EIM Entities under the Energy Imbalance Market design.[98]

4. The Commission Should Not Change The Proposed Treatment of Virtual Bids.

WPTF notes that proposed section 29.11 allocates real-time congestion offset costs to virtual bidding transactions that increase congestion offset costs on a constraint. WPTF believes that this is unreasonable unless there is also a credit when the virtual bids alleviate congestion costs.[99]

The ISO disagrees. Providing a credit would open the door to virtual bidding opportunities designed to exploit the failure to enforce constraints within an EIM Entity balancing authority area.[100] Virtual bids do not cause the system differences that can lead to uplifts. These are generally caused by flow impacts originating outside the ISO system. The appropriate response is to remedy any underlying modeling issues, and the ISO is addressing these matters in its full network model expansion proposal discussed above.[101]

5. It May Be Appropriate To Clarify the Real-time Congestion Offset and the Flexible Ramping Constraint Shadow Price Calculation.

PG&E recommends that any real-time congestion offset charges that may arise from managing such transmission constraints for transmission rights on an external

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98 PacifiCorp Filing for Revisions to the OATT to Implement the Energy Imbalance Market, Docket No, ER14-1578-000 (March 25, 2014) ("Pacificorp EIM Implementation Tariff Filing").

99 WPTF at 6.

100 *See* Market Surveillance Committee Opinion on Initial Implementation of the Energy Imbalance Market and Related Market Design Changes, at p. 19.

101 See discussion *supra* at III(C).

balancing authority area that are held and scheduled by an EIM Entity be treated the same as if the constraints were transmission constraints in the balancing authority area of the EIM Entity that holds and schedules the rights. It contends that the tariff language is not clear on this point. It asks that the tariff be modified to clearly allocate any real-time congestion offset costs that result from a transmission constraint residing outside of an EIM Entity balancing authority area to the EIM Entity that submitted the base schedule affected by that transmission constraint.[102]

The ISO intended the proposed amendments to address PG&E's concern. The ISO will treat real-time congestion offset charges under these circumstances as if they were located within the applicable EIM Entity balancing authority area. The ISO does not believe any changes to the tariff are necessary, but is willing to include additional clarification on compliance if the Commission believes it is appropriate.

PacifiCorp states that in revised Section 11.25.4(a)(2), the ISO indicates that the ratio of the Flexible Ramping Constraint Shadow Price shall be determined in the manner described in Section 11.25.2.1(b). According to PacifiCorp, restatement of the precise manner in which the ratio will be determined in this sub-section, rather than a cross-reference, would avoid a potential neutrality issue that may arise under the current proposed language.[103] PacifiCorp points an error in the drafted language.

The ISO notes that the error is not so much the use of a cross-reference, but the sequence of calculations in the cross-referenced procedure. The current calculation does produce a neutrality issue. The ISO provides an example of the corrected tariff

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[102] PG&E at 4-7.

[103] PacifiCorp at 14.

language as an Exhibit and asks that Commission direct it to correct this error on compliance.

PacifiCorp also notes that in proposed Section 29.11(d), the ISO includes references to the "EIM Base Schedule of Supply submitted by the EIM Entity." PacifiCorp understands the term "EIM Base Schedule of Supply" to include EIM Base Schedules for resources and interchange, but the proposed language in Section 29.11(d) does not expressly provide as such. PacifiCorp is correct, and a revision consistent with PacifiCorp's understanding would be useful.[104] Accordingly, the ISO asks Commission to direct it to correct this error on compliance.

PacifiCorp also seeks a commitment from the ISO to re-evaluate the applicability of language in existing Section 11 of the ISO Tariff concerning the timing of Energy Imbalance Market settlement disputes if actual Energy Imbalance Market operational experience reveals that the timing of the ISO settlement process does not provide for meaningful review by PacifiCorp's transmission customers with non-participating resources or loads subject to Energy Imbalance Market-related settlements.[105] While the ISO does not anticipate the problems that PacifiCorp envisions, the ISO will be mindful of the concerns of EIM Market Participants and monitor the circumstances accordingly. If PacifiCorp's concerns in fact materialize, the ISO may consider whether any changes are warranted, taking into consideration the fact that the settlement and dispute timelines apply equally to all ISO market participants, and it may be difficult to

104 *Id.*

105 PacifiCorp at 8-9.

justify different treatment. The ISO would have to engage all stakeholders in such an effort, and such an undertaking does not appear to be warranted at this time.

I. Transmission Charges

Proposed section 29.26 provides for reciprocity concerning charges for transmission access. Load in the ISO balancing authority area will pay the ISO's transmission access charge for Energy Imbalance Market transactions that sink in the ISO balancing authority area. EIM Transfers from the ISO balancing authority area will not pay the ISO's wheeling access charge. This approach is just and reasonable, not unduly discriminatory or preferential, and consistent with Commission precedent for two related reasons as discussed below. EIM Transfers represent a new form of transmission service other than what is presently provided under the ISO tariff, and the parties involved have agreed to exchange this service without additional charge. Nonetheless, the ISO has indicated that it will further consider this transmission reciprocity structure and potential alternative transmission rate designs during the first year of market operations, and propose a revised transmission access charge if it appears that an alternative would provide for a more efficient dispatch or otherwise further the development of the Energy Imbalance Market.[106] The ISO described three alternatives in addition to the transmission reciprocity structure during its stakeholder process for the Energy Imbalance Market design, but no consensus emerged. The further stakeholder discussion will consider these and possible other methodologies.

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[106] CMUA asserts that ignoring transmission cost allocation issues will not make them go away and that expansion of the EIM must be conditioned on and accompanied by an affirmative proposal on this issue. The reciprocity proposal is just such an affirmative proposal.

1. The Provisions Regarding Transmission Charges Are Not Unduly Discriminatory

Several parties challenge these provisions as discriminatory, providing preferential treatment of EIM Market Participants.[107] This challenge is unfounded. As the ISO explained in its transmittal letter, the proposal simply entails the elimination of pancaked rates, and the use of a license plate rate, across the footprint of an energy market.[108] The Commission has consistently approved such proposals in the past. For example, prior to the formation of the ISO, an energy transaction from PG&E to Edison would require payment of a PG&E transmission rate and an Edison transmission rate. An energy transaction from PG&E to PacifiCorp would require payment of a PG&E transmission rate and a PacifiCorp transmission rate. Following the implementation of the ISO's initial access charge the former transaction would require payment of only the Edison transmission rate, while the latter would still require payment of a PG&E transmission rate and a PacifiCorp transmission rate. The former transaction is analogous to the EIM Transfer, and the latter is analogous to an export out of the EIM Area. The Commission approved this rate methodology as just and reasonable.[109]

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[107] Seattle at 5, WPTF at 3-5, Powerex at 19-26, 32-37, TANC at 19-20, Bonneville at 5-7, Portland at 7-8. *See also* Redding at 7 (expressing concern about the impact of reciprocity on other systems).

[108] This does not set up a "free transmission zone" as Powerex argues. Powerex at 37. As the ISO explained in the stakeholder process, all EIM transactions will require payment of transmission rates.

[109] *Pac. Gas & Elec. Co*., 81 FERC 61,122 (1997). The ISO's license plate rate was an interim rate, as required by the ISO's authorizing legislation, but the Commission did not preclude continued use of a license plate rate. The Commission has approved continued use of license plate rates for facilities that were not jointly planned. *See, e.g., PJM Interconnection, L.L.C.,* Opinion No. 494, 119 FERC ¶ 61,063 at P 54 (2007), *rev'd and remanded on other grounds,, Ill. Commerce Comm'n v. FERC,* 576 F.3d 470 (7th Cir. 2009).

Similarly, when the companies intending to form the Alliance RTO filed a settlement establishing a non-pancaked rate for transactions within a combined Alliance and Midwest ISO region, several parties argued it was discriminatory because it only applied to transactions where the source and sink were both within the Alliance-Midwest ISO "Super Region." They asserted that this unduly favored generation within the Alliance-Midwest ISO Super Region. The Commission rejected these concerns:

> We recognize that limiting availability of the Super Region rate to transactions whose source and sink are located there may provide a competitive advantage to generators located in the Super Region vis-a-vis those located outside the Super Region. There are two overriding considerations. Absent the Settlement, transactions utilizing the facilities of Midwest ISO and Alliance would pay two separate transmission rates. Order No. 2000 does not require two RTOs to charge one rate.] Therefore, the Super Region rate creates a benefit for customers. By requiring the customer to pay only one rate, the proposed Super Region rate may provide to customers additional supply alternatives that might otherwise be uneconomic. In the event that there is only one RTO, the Super Region rate is still a benefit, because the Super Region is larger than either one of the proposed RTOs. Second, the source and sink limitation serves as an incentive to transmission owners that are not currently members of Alliance or Midwest ISO to join one of those organizations.[110]

The same types of benefits justify the ISO's proposal. [111]

Powerex's own purported example of discrimination actually highlights the similarity between the impact of the RTO-wide elimination of pancaked rates and the ISO's proposal. Powerex posits the following:

> Consider two energy-limited hydroelectric units—Unit 1 and Unit 2—located at a single location in the Pacific Northwest, both of which plan to produce 100 MW. The units are identical in every way except Unit 2 is

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[110] *Ill. Power Co.*, 95 FERC ¶ 61,183 at 61,644 (2001) (footnote omitted)...

[111] Powerex attaches the PUC-EIM group's EIM benefit study to show that it recognizes that EIM can indeed have benefits. It is worth pointing out that the PUC-EIM benefit study assumes that hurdle rates (*e.g.,* transmission charges between EIM Entities) are removed within the EIM area.

> located in PacifiCorp's BAA whereas Unit 1 is not. . . . Unit 1 submits a decremental bid at the Malin scheduling point in the CAISO real-time market. If the bid is accepted, it results in a Wheeling Out transaction and incurs the Wheeling Access Charge . . . . Unit 2 is an EIM Participating Resource and submits a decremental bid into the EIM. If the bid from Unit 2 is accepted and power flows from the CAISO grid on the COI to serve the dispatch, the proposed Section 29.26(a)(2) expressly exempts the transaction from paying the $8/MWh Wheeling Access Charge.[112]

This, however, is not discrimination, but merely the result of non-pancaked rates within an energy market footprint. A similar situation can result from the elimination of pancaking, a rate design that the Commission has already approved. Consider the ISO's current market. Substitute a decremental bid by Unit 1 at Lugo for a bid at Malin. Substitute Anaheim's entitlement to power at the Intermountain Generating Station for Unit No. 2. The Intermountain Generating Station is outside the ISO balancing authority area but connected to the ISO controlled grid by Anaheim's and Riverside's entitlements under the ISO's Operational Control. In both cases, the decremental bid, if accepted, will be "exported" from facilities owned by Southern California Edison at Lugo. Because Anaheim's entitlements are within the footprint of the ISO market, Anaheim will not pay a wheeling charge. Unit 1 will pay a wheeling access charge. The only substantive difference from Powerex's example is that Anaheim's facilities are under the ISO's operational control, which on this case only means that the ISO can schedule on them, much as it would schedule in real-time on the transmission rights made available to the Energy Imbalance Market. Thus, from a market perspective, there is no difference.

In its attempt to allege undue discrimination, WPTF posits a PacifiCorp resource selling through, and outside of, the CAISO and states that this resource does not have

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[112] Powerex at 23-24.

to pay wheeling when a CAISO supplier would, creating a distortion.[113] WPTF's premise is erroneous. Only EIM Transfers are exempted from wheeling access charges. A transfer out of the EIM Area is not an EIM Transfer. A PacifiCorp resource that sells through, and outside of, the CAISO will still have to pay the wheeling access charge.

WPTF is correct that PacifiCorp intends to require that a PacifiCorp resource have transmission service with PacifiCorp in order to participate in the Energy Imbalance Market. This is precisely why PacifiCorp has proposed an hourly non-firm rate— to allow more resources within its balancing authority areas to participate.[114] As the ISO explained in its transmittal letter, the proposed design will not create rate pancaking because for long-term customers, the cost of transmission is a fixed cost.[115] EIM Transfers will not increase the marginal cost of transmission. In contrast, an export today from PacifiCorp would presumably require point-to-point service to the specific exit point.

2. The Provision of Transmission Reciprocity Is Consistent with Commission Approval of the Elimination of Pancaked Rates Between RTOs.

In the transmittal letter, the ISO cited two decisions in which the Commission went even beyond eliminating pancaking rates within an RTO and approved their elimination *between* RTO markets.

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113 WPTF at 4.

114 Docket No. ER14-1578-000, Pacificorp EIM Implementation Tariff Filing at 29-33.

115 The exception is that resources without long term service will have to take short-term service. This is necessary to prevent free ridership with regard to Energy Imbalance Market transactions within PacifiCorp.

Powerex attempts to distinguish *Midwest Independent Transmission System Operator*[116] on the basis that the pancaking at issue was intra-RTO pancaking, not inter-RTO pancaking.[117] Powerex is correct that the motivating concern was the existence of intra-RTO pancaking, but the fact remains that in order to avoid pancaking within one market, the Commission eliminated pancaking *between* markets.

Powerex uses a different rationale to attempt to distinguish *ISO New England, Inc. v. New England Power Pool*,[118] in which, as Powerex concedes, the Commission determined that the elimination of seams would assist the development of a vital market across the Northeast region—much as the ISO and PacifiCorp are seeking to do here.[119] Powerex points out that the seams elimination involved all temporal timeframes and did not eliminate pancaking in one market while preserving it in others.[120] The ISO acknowledges that the Energy Imbalance Market proposal may be the first to include a transmission access charge tailored specifically for one market,[121] but it also would be the first imbalance energy market extending beyond the border of an RTO if accepted by the Commission.[122] This does not, however, render it unjust, unreasonable, or

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116 104 FERC ¶ 61,105 (2003).

117 Powerex at 36.

118 106 FERC ¶ 61,280 (2004).

119 The ISO's proposal is not to the contrary; it also involves the elimination of pancaked rates for all market participants in the energy imbalance market.

120 Powerex at 37.

121 Bonneville attempts to distinguish both cases by observing that they involved the elimination of pancaking for all market participants. Bonneville at 8. The ISO's proposal is not to the contrary; it also involves the elimination of pancaked rates for all market participants in the energy imbalance market.

122 *See Midwest Indep. Transmission Sys. Operator*, 126 FERC ¶ 61,139, at PP 59-75 (2009) (rejecting MISO's proposed market services tariff because too many of the benefits of an

unduly discriminatory or preferential. Forward markets, such as the day-ahead market and the fifteen-minute market, and the real-time five-minute energy imbalance market are two different services. The transmission service associated with participation in forward markets is likewise a different service than the transmission service associated with real-time EIM Transfers. As discussed further below, forward market schedules have some level of curtailment priority, while EIM Transfers have no such priority and use only such capacity as may be available in real time. Powerex does not provide a precedent requiring uniformity of transmission charges for services that are qualitatively different.[123] To the contrary, it is well-settled that rate differentials *are not* unduly discriminatory or preferential when the customers are not similarly situated because they receive different services.[124]

3. The Precedent on Which Powerex Relies Is Not Inconsistent with the ISO's Proposal.

Powerex asserts that the proposed reciprocity is contrary to Commission precedent, but none of the precedent on which Powerex relies is contrary to the proposal. Powerex cites the prohibition against discounting in Order No. 888-A.[125] The transmission reciprocity under the Energy Imbalance Market, however, is not discounting. Selective transmission service discounting distinguishes among customers receiving the same service. As the ISO has previously explained, all customers

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RTO were extended without full participation, not because the market services extended beyond the MISO border).

123 Indeed, rates for congestion management, which, as an ancillary service, is a transmission service, typically differ between different temporal markets.

124 *Transwestern Pipeline Co*., 36 FERC ¶ 61,175, at 61,433 (1986).

125 Powerex at 33.

purchasing energy in the Energy Imbalance Market pay the non-pancaked rate. Any balancing authority area in the Western Interconnection will be eligible to join the Energy Imbalance Market.

Powerex attempts to dismiss this consideration by arguing that resources can only participate in the Energy Imbalance Market if the balancing authority area in which they are located participates in the Energy Imbalance Market. This is incorrect. Resources can participate in the same real-time market of which the Energy Imbalance Market is a part, as a dynamic resource into the ISO regardless of the balancing authority area in which they are located. Powerex acknowledges that it already participates in the ISO markets.[126] Under a dynamic transfer agreement with the ISO, it would be able to participate in the real-time market in the same manner as a resource physically located on the ISO Controlled Grid. Powerex will need to pay those charges it currently pays to reach the ISO grid, but it will have the same access to reciprocal transmission charges as other participants in the Energy Imbalance Market. All participants in the Energy Imbalance Market have the benefit of reciprocal transmission charges for transfers within the market's footprint.

In an attempt to avoid the conclusion that there are different services involved, Powerex argues that existing transmission and uplift charges[127] will continue to apply to "non-EIM real-time transactions."[128] Powerex asserts that it is not aware of any Commission-approved transmission rates that differentiate service on the basis of the

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126 *Id.* at 2.

127 The error in Powerex's discussion of uplift charges is discussed below.

128 Powerex at 28.

particular market design in which the transactions are executed, as opposed to on the basis of priority and duration of service.[129] The distinction involved here is not the market design, however. It is the nature of the service provided. Hourly day-ahead exports and fifteen-minute market exports are fundamentally different from EIM Transfers.

Hourly day-ahead exports and fifteen-minute market exports are static schedules. The ISO must dispatch around the export to honor the schedule and prescribed ramps between the schedules. Thus, if congestion materializes after the schedule is awarded, the exporter is not exposed to these costs. Because the usage of the grid is guaranteed (except in emergency situations) and the ISO accordingly must dispatch around the static schedules, it is appropriate for these export schedules to pay the wheeling access charges. Also, participation for 15-minute intervals includes optimized unit commitment that is not part of the fifteen-minute market for non-EIM participants.

In contrast, EIM Transfers are equivalent to dynamic schedules. A dynamic export is not guaranteed to flow beyond the 5-minute dispatch interval. If congestion materializes, the export will not use the transmission. For this reason, a dynamic export provides more flexibility to the ISO and has less certainty for the scheduling coordinator than a static schedule. Therefore, they are fundamentally different services for which different rate treatment is permissible.

Powerex's next citation of precedent is a quotation of the Transmission Pricing Policy Statement: "[A] utility must allocate among individual customers or classes of

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129 *Id.*

customers that portion of the total revenue requirement that is attributable to providing transmission services, in a manner which appropriately reflects the costs of providing transmission service to such customers or classes of customers."[130] Powerex offers no explanation as to how the ISO's proposal violates this principle. The Commission has consistently found the elimination of pancaked rates to reflect this principle.[131]

Powerex also cites the Commission's approval of SPP's uniform transmission rate for all transactions within its footprint[132] and of the requirement that entities have transmission service in order to participate in SPP's energy imbalance market.[133] As an initial matter, nowhere in the Commission's approval of SPP's uniform transmission rate or its approval of SPP's energy imbalance market did the Commission indicate that a license plate proposal would be unjust or unreasonable, and other Commission decisions demonstrate this is not the case. The approval of one rate methodology does not demonstrate that other methodologies are not just and reasonable. Moreover, the reliance of the SPP decisions is simply inapt. The ISO, like SPP, has had a single transmission access charge applying to transactions within its footprint since 2001, years before SPP. The issue here concerns transmission access in a market whose

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130 *Id.* at 33.

131 *Midwest Indep. Transmission Sys. Operator*, 109 FERC ¶ 61,168 at P 59 (2004) (finding license plate rates consistent with the Commission's regional transmission pricing policies).

132 Powerex at 34, citing *Sw. Power Pool, Inc.*, 109 FERC ¶ 61,009 at PP 36-40, 48-51 (2004).

133 *Id.,* citing *Sw. Power Pool, Inc.*, 114 FERC ¶ 61,289 (2006).

footprint extends beyond the ISO's balancing authority area. In contrast, for practical purposes, SPP's energy imbalance market does not extend beyond its footprint.[134]

Finally, Powerex points to the Commission order requiring PJM and MISO to revise grandfathered contracts so that those customers do not pay more than the ISO rate.[135] In those cases, the Commission was directing revision of the transmission under the grandfathered contracts administered by PJM and MISO so that the service provided would be essentially the same service as under the open access tariff. As explained above, the rates for transmission under the Energy Imbalance Market are available for any entity participating in the market, so the differential treatment with which the Commission was concerned is not presented. The only differential treatment presented here is the result of different service.

4. The Reciprocity of the Transmission Arrangements Distinguishes EIM Market Participants from Non-EIM Market Participants.

In other circumstances the Commission has concluded that the reciprocity of transmission arrangements distinguishes participants from non-participants such that the arrangement is not discriminatory. For example, to replace a transmission service agreement that PG&E was cancelling, the ISO, PG&E and Western Area Power

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[134] The ISO understands there are two municipal utilities that participate in the SPP energy imbalance market, for which they must take transmission service, but who otherwise are not covered by the SPP tariff. If there were a load wheeling through their territories, or an independent generator submitting a decremental bid into SPP's market, the load or generator would not be paying only the SPP regional wide rate. Rather, it would have to pay both the SPP transmission charge and the municipal's transmission charge in the same manner in which an export other than a EIM Transfer would pay both the ISO wheeling access charge and the transmission charge of the receiving utility. To the ISO's knowledge, such a circumstance does not exist in the SPP energy imbalance market.

[135] Powerex at 35, citing *Penn.-N.J.-Md. Interconnection*, 81 FERC ¶ 61,257 (1997) and *Midwest Indep. Transmission Sys. Operator, Inc.*, 84 FERC ¶ 61,231 (1998).

Administration entered an agreement to exchange transmission capacity on PG&E-owned facilities for capacity on Western-owned facilities.[136] The effect of the agreement was to allow the ISO customers and Western customers to avoid pancaked rates between Oregon and California, much as the ISO's proposal allows EIM Market Participants to avoid pancaked rates.

One party argued that under the transmission exchange agreement, Western would receive preferential treatment because it would receive firm service in the day-ahead and hour-ahead markets without having to bid, and would be exempt from congestion charges, scheduling charges, and other ISO charges. The party contended that the ISO Tariff provides for transmission service scheduled entirely on a day-ahead and hour-ahead basis and does not provide for long-term service contracts except for those that pre-date the start of CAISO operations.

The Commission found that the transmission exchange agreement between the ISO, PG&E and Western provided substantial benefits to all of the parties by providing access to the other party's system and eliminating the potential for rate pancaking between the ISO and the Pacific Northwest.[137] The Commission also found that the exchange arrangements enhanced reliability and access to different resources and were not unduly discriminatory.[138] It noted that although Western would receive

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136 *Pac. Gas & Elec. Co.,* 109 FERC ¶ 61,255 at P 11 (2004), ***aff'd sub nom., Sacramento Mun. Util. Dist. v. FERC,*** 474 F.3d 797 (D.C. Cir. 2007). The Commission has also accepted a similar agreement between the ISO, PG&E, and PacifiCorp. *PacifCorp,*121 FERC ¶ 61,278 (2007) (order approving uncontested settlement that included a transmission exchange agreement).

137 *Pac. Gas & Elec. Co.,* 109 FERC ¶ 61,255 at PP 49-50.

138 *Id.* at PP 53-55.

exchange service outside the terms and conditions of the ISO Tariff, there are substantial benefits accruing to the ISO customers.

In addition, PG&E had filed a notice of cancellation of a transmission service contract with SMUD. SMUD protested the cancellation, arguing that it would be discriminatory to terminate firm long-term service under its transmission service agreement when the CAISO is willing to offer such service to Western.[139] The Commission found that SMUD was not similarly situated to Western because SMUD could not offer a similar exchange of capacity with the ISO and was essentially seeking a "set aside" of capacity for itself.[140] Similarly, there is no discrimination here because in the Energy Imbalance Market context, transmission in the forward markets and transmission between the ISO and non-EIM balancing authorities are not similarly situated to transmission in the Energy Imbalance Market. In that regard, the ISO and PacifiCorp are only "exchanging" an agreement not to impose transmission charges on real time capacity that is available and used for EIM Transfers on their respective systems. There is no "exchange" of forward transmission capacity between the two systems. Thus, there is no basis for the ISO to exempt transmission associated with forward market transactions from transmission usage charges. To the extent other balancing authorities become EIM Entities and "exchange" available real-time capacity with the ISO, EIM Transfers into such neighboring systems will not be subject to ISO

139 *Id.* at P 67.

140 109 FERC at PP 53, 72-73; 111 FERC at PP 23-24; 474 F. 3d at 804.

transmission charges. Thus, the Energy Imbalance Market does not result in any undue discrimination.[141]

5. Protestors' Policy Arguments Do Not Support Rejection of the ISO's Proposal.

Parties also make three policy arguments against the proposed treatment of transmission access charges. None provide a reason for the Commission to reject the ISO's proposal.

First, Bonneville, TANC and Powerex express concerns about the potential that EIM Entities will shift existing day-ahead and real-time trading and scheduling activities into the Energy Imbalance Market to take advantage of the CAISO's waiver of the wheeling access charge.[142] The ISO explained in its transmittal letter that such a result is certainly possible, but that at this point it is premature and based on unfounded speculation. Powerex counters that any evaluation of a proposed new market design or rules requires careful analysis of the consequences of those rules.[143] The ISO does not disagree, but there is currently no evidence with which to perform such an analysis. The best manner of testing Powerex's hypothesis is to implement and monitor the

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[141] One can reasonably consider the proposed treatment of real-time EIM Transfers as comparable to a bilateral exchange or sharing of capacity that provides mutual benefits. Commission decisions authorizing such arrangements provide further support for the ISO's treatment of EIM Transfers from the ISO balancing authority area. For example, the Commission has authorized MISO to provide a new, separate Seams Service to neighboring systems that are not members of MISO. *Midwest Indep. Transmission Sys. Operator,* 123 FERC ¶ 61,265 (2008). As part of that service, the Commission approved a capacity sharing provision that creates a reciprocal obligation for MISO and a Seams Service customer to share unused path capacity on each other's system. *Midwest Indep. Transmission Sys. Operator,* 135 FERC ¶ 61,205 (2011). The Commission declined to reject the provision on the grounds that the capacity sharing arrangement might benefit one party more than another. The Commission recognized that these were wholly voluntary arrangements that might provide mutual benefits to both parties.

[142] Powerex at 29; TANC at 19-21; Bonneville at 6.

[143] Powerex at 31, Edison, Appendix B at 1.

proposal as the ISO intends to do. The fact that the Energy Imbalance Market will initially involve only three balancing authority areas and only a limited amount of transfer capacity provides an ideal circumstance for interested parties to gather and evaluate information. The ISO has made a commitment to evaluate the impact of transmission reciprocity and to develop an alternative if there are untoward effects. This does not require a sunset provision, as Powerex and Edison suggest.[144] The ISO has consistently fulfilled its commitments to the Commission, and a sunset provision to enforce the commitment would actually create more uncertainty by providing for an arbitrary end date for a rate that is just and reasonable, particularly as such a deadline approaches. Also, to the extent Powerex, TANC or Bonneville believe that that the market operation has produced evidence of adverse, inappropriate market impacts, they can file a complaint under section 206. Establishing a sunset date at this time based on unfounded speculation would be arbitrary.

As part of this argument, Powerex also contends that the proposed treatment of transmission access charges would distort export activity from the PacifiCorp Grid. According to Powerex, a market participant, rather than purchasing energy directly in the ISO markets and paying the wheeling access charge, could effectively export the same ISO-sourced energy through the Energy Imbalance Market footprint and pay the lower export charge under the PacifiCorp tariff. Powerex contends that the market participant could accomplish this result by first scheduling a generator in the PacifiCorp footprint for export under the PacifiCorp OATT scheduling framework, and then

144 *Id,*

decrementing the generator's output in the Energy Imbalance Market—with power flowing from the CAISO grid to backfill the generator's reduction in output.

Powerex is wrong. The strategy cannot be implemented under the Energy Imbalance Market design. A market participant cannot choose to decrement a resource through its base schedule; the market optimization does this. Base schedules are self-scheduled in to the Energy Imbalance Market unless the bid range of the resource is below the base schedule. In order to execute the posited export, the resource base schedule must violate the rules for submission of base schedules.[145] Neither EIM Participating Resources nor EIM Entities can submit incremental or decremental self-schedules from the base schedule during the real-time market.

If a participating resource is decremented it will be because it is economically efficient for the entire EIM Area. Moreover, because EIM Transfers are not static, there is no way to guarantee that resource's fifteen-minute market schedule will equal its export schedule and no guarantee that the real-time dispatch will equal the fifteen-minute market schedule.

Second, Powerex and Bonneville assert that the ISO's proposal will reduce "wheel-through" revenues, particularly for large intermediary transmission providers such as the ISO and PacifiCorp. They argue that this will increase charges for remaining customers.[146] The ISO already explained in the transmittal letter that the ISO and PacifiCorp are willing to forego any lost wheeling revenues in return for the reciprocal access to a more diverse set of generation resources to meet load at lower

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145 *See* Proposed § 29.34(l) (requiring base schedules to be balanced and feasible).

146 Powerex at 29; Bonneville at 6.

cost provided by the Energy Imbalance Market.[147] Further, customers within ISO, who would bear their share of any increased charges, [148] have not complained about this potential increase. As discussed above, the Commission has approved similar arrangements where there were mutual benefits for both parties and both parties voluntarily agreed to accept the benefits and the burdens of the arrangement.

Further, a rate methodology is not unjust and unreasonable merely because some rates may go up. For example, when the ISO moved from a license plate transmission access charge to a postage stamp transmission access charge, rates went up in certain service territories and down in others. Although the Commission approved a mechanism to keep cost shifts below a certain amount, it did not consider the cost shifts sufficient to demonstrate that the proposal was unjust or unreasonable.[149]

Third, Powerex again predicts "distortions to both the static and dynamic efficiency of western wholesale energy and transmission markets through preferential transmission pricing in the narrow temporal Energy Imbalance Market."[150] As in the case of its comments in the stakeholder process, Powerex does not explain what distortions it is predicting other than those already discussed above.

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147 PacifiCorp will be the only EIM Entity at the outset of the Energy Imbalance Market.

148 In 2013, wheeling access charges were approximately $148.5 million, constituting 7.5% of the total access charges of approximately $1830.9 million.

149 *Cal. Indep. Sys. Operator Corp.*, 109 FERC ¶ 61,301 (2004).

150 Powerex at 29.

J. Administrative Fee

The ISO has proposed an administrative charge to recover its ongoing costs from participants in the Energy Imbalance Market. The administrative charge is paid only by EIM Market Participants.[151] No party has protested the ISO's administrative charge.

Modesto notes that the ISO relies on the 2010 cost of service study for support for the initial Energy Imbalance Market administrative charge.[152] This is correct, but provides no reason to modify the proposed administrative charge. Formulation of the proposed administrative charge used the same basic methodology as the current grid management update process, only it was applied to the prior cost of service study performed by the ISO for the 2012-2014 grid management charge currently in effect. The 2010 cost of service study remains the best information available until the broader grid management charge update effort is allowed to unfold in 2014, and is a reasonable basis for the administrative charge. In fact, the ISO anticipates the specific amount currently proposed as the administrative charge to be in effect only from October 1, 2014 until December 31, 2014 – just three months.

Modesto also states that it is essential for the upcoming GMC stakeholder process to show how any ongoing Energy Imbalance Market administrative charge derives from the 2015 updated cost of service study, in order to provide adequate

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[151] The components of the Energy Imbalance Market administrative charge are the same as the ISO real-time market components of the grid management charge. Current market participants will continue to pay for the real-time components included in the grid management charge. The objective has always been to ensure that EIM Market Participants are treated similarly by paying for these same components of the real-time market as paid by current market participants. *See* Modesto Comments at 5 (requesting clarification that only EIM Market Participants will be allocated this charge).

[152] Modesto at 5.

support for the charge.[153] The 2015-2017 grid management charge update materials were posted for stakeholder review and comment by the ISO on April 2, 2014;[154] so Modesto and others can already begin an examination of the data that will support an updated charge. Stakeholders will have a full opportunity to participate in the process to establish the administrative charge for the Energy Imbalance Market, which the ISO will file with the Commission later this year. The ISO expects the updated grid management charge, based on a targeted cost of service study and subject to focused stakeholder input, to be in effect before any other balancing authorities would be participating in the Energy Imbalance Market.

Six Cities contends that the proposed Energy Imbalance Market design does not adequately address recovery of potential stranded costs from withdrawing participants.[155] The ISO does not believe that an assessment of stranded costs is necessary in the event an EIM Entity later decides to terminate its participation on the Energy Imbalance Market. An important element of the Energy Imbalance Market design is the opportunity for an EIM Entity to participate upon payment of its portion of the implementation costs, and to exit without incurring additional fees above and beyond the administrative fees that must be paid through termination. The recovery of implementation costs and the collection of an ongoing administrative charge are sufficient to eliminate any material risk of stranded costs. Moreover, there is no justification for an open ended requirement to later determine what amounts may not

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153 *Id*.

154 *See* Budget and Grid Management Charge Materials for the April 17, 2014 Stakeholder Meeting (including an Energy Imbalance Market cost of service study).

155 Six Cities at 12.

have been recovered by the ISO. It is the responsibility of the ISO and the purpose of the administrative charge update processes to ensure that all market participants pay their share.[156] Imposing a future look back cost exposure risk on EIM Entities would represent an unnecessary barrier to their participation.

Lastly, PacifiCorp requests that the ISO revise the proposed administrative charge language in certain respects.[157] Although the ISO believes the proposed language accurately represents the calculation and allocation of the administrative charge, it agrees that PacifiCorp's requested clarifications would improve the understanding of the administrative charge among all EIM Market Participants. Accordingly, the ISO asks the Commission to direct it on compliance to propose changes to section 29.11(i) that address PacifiCorp's concerns. The ISO will include revisions that more precisely indicate that the calculation will be performed once for all EIM Market Participants within each EIM Entity balancing authority area. In addition, the ISO will make changes that more clearly explain the calculation to be performed and the amounts to be allocated to scheduling coordinators in the Energy Imbalance Market. These revisions will improve the overall precision of the language without changing the actual charge to scheduling coordinators, and the Commission should direct the ISO to make them on compliance.

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156 *See, contra*, Letter Order Dated February 4, 2013 in Docket ER11-3415-001 (accepting an exit fee agreement). In this instance, the ISO will have appropriately accounted for upfront and ongoing costs and no exit fee is necessary.

157 PacifiCorp at 9-11.

K. Market Power Mitigation

Proposed section 29.39 extends the ISO's current market power mitigation to the Energy Imbalance Market. For differing reasons, a number of parties object to the ISO's proposal. The ISO's current local market power mitigation procedures apply in the day-ahead and real-time markets. The market power mitigation process automatically tests for constrained paths that would create the potential to exercise local market power. If the process determines that the potential exists, the procedure will mitigate bids. For the real-time market, the ISO runs the market power mitigation process once every fifteen minutes. The ISO's mitigation process is premised on a distinction between competitive and non-competitive transmission constraints. The ISO's local market power mitigation process will use mitigation—where default energy bids are considered in place of submitted bids—only for constraints that are non-competitive as determined by the ISO's dynamic competitive path assessment. The Commission accepted the ISO's improved real-time market power mitigation in its April 29, 2013 order.[158]

1. Market Power Mitigation Procedures Belong in the ISO Tariff.

Powerex objects to a one-size-fits-all market power mitigation process and argues that mitigation measures are more appropriately determined by the Commission on a case-by-case basis within the context of reviewing proposed changes to each balancing authority area's open access tariff.[159] It is not clear to the ISO how or why the

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[158] See *Cal. Indep. Sys. Operator Corp.,* 143 FERC ¶ 61,078 (2013). The Commission had previously accepted the ISO's tariff amendment to implement improved day-ahead market power mitigation in *Cal. Indep. Sys. Operator Corp*., 138 FERC ¶ 61,154 (2012).

[159] Powerex at 73-75.

Commission would consider the question of whether to include EIM Transfer constraints in the context of each EIM Entity tariff.[160] It is not necessary, nor would it be appropriate, to subject different regions of the ISO real-time market to different mitigation procedures. The potential exercise of market power is market power within the Energy Imbalance Market, and the Energy Imbalance Market is governed by the ISO tariff.

2. A Structural Competitiveness Assessment Should Precede the Implementation of Market Mitigation Measures.

Some parties request that the Commission order the ISO to implement mitigation of EIM Transfer constraints on day one without any consideration of a structural competitiveness assessment.[161] At the same time, others argue that the Commission should consider this question with respect to each EIM Entity to avoid the risk of deterring participation. They also claim that the mitigation provisions should be in the EIM Entity tariff, not the ISO tariff.[162]

Application of the ISO's market power mitigation measures ensure that outcomes in the ISO real-time market remain competitive by reflecting the fact that when market power exists, all suppliers—including even smaller suppliers—may have market power. These issues were discussed in detail in the proceedings before the Commission under which the ISO's initial nodal market design was approved. After thorough consideration of this issue prior to start of the ISO's redesigned market in 2009, the Commission found this and other aspects of the ISO's market power mitigation provisions to be

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160 Powerex at 87-89.

161 Edison at 5; *see also* Six Cities Comments at 11; and Bonneville Comments at 7.

162 Powerex at p. 73-75.

appropriate and just and reasonable.[163] In 2012 and 2013, the ISO amended its tariff to improve the efficiency and accuracy of its local market power mitigation.[164] The ISO's market power mitigation have functioned well in the ISO real-time markets and contributed overall to more competitive market outcomes.[165] There is no reason to suspect these same measures will not work equally well in the Energy Imbalance Market, particularly as the ISO gains more knowledge and experience in that regard. Protestors provide no specific evidence why they will not work.

The only significant issues are, first, whether a structural competiveness assessment is necessary prior to deciding whether to include EIM Transfer constraints in the automated market power mitigation process and thus make them potentially subject to mitigation; and, second, if such an assessment is necessary, whether that determination should be made by the ISO board or by the Commission.[166]

The ISO has proposed a balanced approach to resolving this question. The ISO will apply mitigation to EIM Transfer constraints only under limited market conditions. Specifically, EIM Transfer constraints initially will only be included in the automated mitigation procedures if, prior to implementation in a specific balancing authority area,

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

164 *Supra* at n. 159.

165 *See, e.g.,* 2012 Annual Report of Market Issues and Performance, California ISO Department of Market Monitoring, Docket No. ZZ13-4-000 (assessing market performance and concluding they are efficient and competitive). In addition, the ISO's Department of Market Monitoring also provides regular reports on market issues and performance. It is not necessary to include additional reports associated with the Energy Imbalance Market. These regular and annual reports will include information associated with the Energy Imbalance Market. *See* Neighboring Systems Comments at p. 19 (requesting quarterly reports on the performance of the Energy Imbalance Market).

166 *See* DMM Report at 2-3 (Attachment F to the ISO Transmittal Letter); and MSC Opinion at 30-31 (Attachment F to the ISO Transmittal Letter).

the ISO determines, using the criteria in proposed section 29.39(d), that there may be an insufficient amount of competitive supply to prevent the exercise of market power. As the ISO gains experience with the actual supply and demand within an EIM Entity balancing authority area and potential supply from the ISO balancing authority area (or other EIM Entity balancing authority areas) based on actual EIM Transfer limits, the ISO will periodically reassess the competitiveness of each EIM Entity balancing authority area on these empirical data. The ISO will adjust constraints as appropriate.

This approach allows the ISO to consider the components of the structural competiveness assessment from the outset as well as when the Energy Imbalance Market expands, providing a more dynamic approach. The ISO does not believe that it is necessary to include EIM Transfer in the mitigation process absent some evidence that the exercise of market power is possible. Neither does the ISO believe that the ISO board is not fully capable of an informed, independent, and nondiscriminatory judgment based on the structural competiveness assessment.[167] Nonetheless, the ISO remains open to alternative direction from the Commission. If the Commission determines that it must decide whether mitigation of EIM Transfers is appropriate, the ISO encourages the Commission to make this determination prior to October 1, 2014, and to consider how the ISO might avoid the need to return to the Commission for another determination as each new EIM Entity joins or the empirical data suggests that EIM Transfer constraints no longer need to be included as part of the ISO's automatic mitigation procedures.

Contrary to Powerex's assertion and what some other comments suggest, the ISO would not automatically mitigate all resources in the EIM Entity balancing authority

[167] See section III.L, *infra.*

area.[168] Under the ISO proposal, bids into the Energy Imbalance Market will be mitigated only when warranted due to the potential for market power. If EIM Transfer constraints are included in the automated mitigation procedures, resources within an EIM Entity balancing authority area will only be subject to mitigation under the same conditions and process that mitigation is applied for any other internal constraint within the ISO system, which the Commission has already found to be just and reasonable.[169] Under this process, resources would only be subject to mitigation if congestion into the EIM Entity balancing authority area is projected to occur, and market conditions within the EIM Entity balancing authority area are found not to be competitive pursuant to the dynamic competitive assessment incorporated in the ISO automated mitigation procedures. Even if this test does not indicate that competitive conditions exist in the EIM Entity balancing authority area, bids for resources are only mitigated if they exceed the higher of the competitive system wide price for the combined EIM Area or the resource's default energy bid.

3. There Should Be Uniform Default Energy Bid Determination Procedures Throughout the EIM Area.

Powerex and Chelan contend that the ISO's market power mitigation measures are not appropriately tailored for the Energy Imbalance Market or do not adequately consider the unique characteristics of resources located outside the ISO balancing authority area. For example, Protestors suggest that the ISO's calculation of default energy bids is unable to account for the opportunity costs of hydroelectric resources that

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168 Powerex at 76.

169 *Supra* at n. 159.

predominate in the Northwest.[170] Powerex offers alternatives from other market power design efforts that the Commission has deemed just and reasonable in the past.[171]

The default energy bids that would be used in the mitigation procedures are determined for each resource based on resource specific costs, such as the variable cost option and negotiated default energy bid option, or based on prevailing locational marginal prices in the locational marginal pricing option. The fact that the Commission has accepted other alternative approaches in other circumstances does not render the ISO's proposed market power mitigation measures unjust and unreasonable. All participants in the real-time market should be subject to the same rules, and that is effectively what the ISO has proposed. The energy Imbalance market is an extension of the ISO's existing real-time market, and the same rules should apply to both. It would be inappropriate to treat similarly situated entities within the same market differently unless the circumstances justified otherwise.[172] Protestors fail to identify any such circumstances to justify their request for alternative treatment.

To the contrary, experience demonstrates that differential treatment is not necessary. The ISO has more experience in operating western markets than any other entity, and the ISO balancing authority area includes a significant amount of hydroelectric generation. The ISO is not aware of any untoward results from the current operation of its market power mitigation process. As noted, EIM Participating Resources with energy limitations can reflect opportunity costs in future time periods

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170 Powerex at 77-83; Chelan at 5-6.

171 Powerex at 81.

172 EIM Participating Resources are also eligible to justify opportunity costs in the negotiation of their default energy bids, further mitigating such concerns.

and markets under the negotiated rate option.[173] Moreover, participation in the Energy Imbalance Market is completely voluntary—both in terms of whether a resource chooses to become eligible to participate in the Energy Imbalance Market, as well as the quantity (if any) it bids any specific hour. There is no must-offer or other similar requirement that would suggest that resources could be called upon when they were unwilling to offer energy. Accordingly, Powerex's concern that a resource will be restricted in terms of the other markets in which it may participate or would not be able to recover their opportunity costs if it is subject to mitigation[174] is unfounded.

PacifiCorp requests that the ISO supplement the manner in which default energy bids are currently calculated for purposes of the Energy Imbalance Market. PacifiCorp notes that although section 39.7.1 identifies a number of costs factored into the variable cost option, there is no recognition of a transmission service charge in the generator's cost of service because participating ISO resources do not pay for transmission. In contrast, PacifiCorp EIM Participating Resources can be subject to transmission charges as a result of their participation. Accordingly, PacifiCorp believes these transmission costs should be an element of the variable cost option for calculating Default Energy Bids.

The ISO appreciates PacifiCorp's concern. However, it is not necessary for the ISO to change the variable cost option for EIM Participating Resources to address these concerns. EIM Participating Resources are able to use the flexibility afforded by the

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[173] The negotiated rate option is between the ISO's third party default energy bid service provider, Potomac Economics, and the resource owner based on defined parameters, including opportunity costs. *See* BPM for Market Instruments.

[174] Powerex at 78.

negotiated option and request that the cost be based on the same methodology as the variable cost option, plus the per MW hour cost of transmission as sought by PacifiCorp. This would embed the variable cost of transmission in the default energy bid, which would otherwise have been recovered in the event their bids were mitigated. The current tariff generally supports this approach, and the ISO commits to providing additional details in the business practice manual for the energy imbalance market to reflect just these clarifications.

4. The Commission Should Direct Correction of an Erroneous Cross Reference.

Three parties have noted that proposed sections 29.39(c)(2) and (3) refer to a nonexistent section 29.39(c)(4).[175] During drafting, the ISO moved section 29.34(c)(4) to section 29.39(d) but neglected to correct the cross-reference. The ISO requests that the Commission direct that it correct this error on compliance.

L. Independence

1. The Interim Energy Imbalance Market Governance Structure Satisfies the Commission's Independence Requirements.

As the ISO explained in the transmittal letter, it is forming a Transitional Committee to advise the ISO Board on Energy Imbalance Market matters and consider options for a long-term Energy Imbalance Market governance structure. Powerex claims, however, that until a more permanent Energy Imbalance Market governance structure is implemented, Energy Imbalance Market governance will not be independent.[176] Powerex argues that the ISO Board does not meet the Commission's

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175 *Id.* 95; Six Cities at 12; and Bonneville at p. 4.

176 Powerex at 18-19.

independence criteria for a multi-state organized market because its members are appointed by California's Governor and confirmed by the State senate.[177] Powerex states that the independence and governance requirements for regional transmission organizations and independent system operators set forth in Order Nos. 888, 2000, and 719 apply with equal force to Energy Imbalance Market, and that the Energy Imbalance Market proposal fails to meet those requirements.[178] Powerex urges the Commission to require that additional mechanisms be imposed on the ISO to achieve independence consistent with these orders.[179]

Powerex's claims are unfounded. Powerex's premise that new or different independence requirements apply to the ISO because of the expansion of its real-time energy market to encompass additional balancing authorities is wrong. The Commission has not adopted different governance and independence requirements for multi-state independent system operators than it has for single state independent system operators. Neither has it required an independent system operator that expands its footprint to add new members or serve new customers (including entities that are located in different states) to modify its board membership or board structure.

The ISO remains subject to independence and governance requirements adopted in Order Nos. 888, 2000, and 719 regardless of the geographic extent of its real-time energy market. As discussed below, the Commission has found that the ISO satisfies these requirements, and Powerex identifies nothing that undermines that

177 *Id.* at 15.

178 *Id.* at 16-17.

179 *Id.* at 19.

conclusion or presents any other basis for the Commission to require the ISO to adopt a different governance structure for Energy Imbalance Market during the interim period when the Transitional Committee is seated.[180]

Order No. 888 required that (1) independent system operator governance be structured in a fair and non-discriminatory manner, and (2) the independent system operator and its employees have no financial interest in the economic performance of any market participant.[181] In particular, Order No. 888 provided that an independent system operator must be independent of any individual market participant or class of market participants, such that no class of participants has control.[182] Similarly, Order No. 2000 required that a regional transmission organization (1) operate independently of market participants, and (2) have the independent and exclusive right to make section 205 filings to establish the rates, terms, and conditions of service over the facilities it operates.[183] Neither Order No. 888 nor Order No. 2000 established different independence requirements based on the geographic extent of an organization's energy market.

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[180] These arguments are independent of the outcome of the efforts undertaken by the Transitional Committee and would apply equally even if no further governance changes are proposed as a result.

[181] *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 31,730-31 (1996), *order on reh'g,* Order No. 888-A, FERC Stats. & Regs. ¶ 31,048 (1997).

[182] Order No. 888 at 31,730-31.

[183] *Regional Transmission Organizations,* Order 2000, FERC Stats. & Regs. ¶ 31,039 at 31,061-76 (1999), *order on reh'g,* Order No. 2000-A, FERC Stats. & Regs. ¶ 31,092 (2000).

The Commission has found that the ISO's governance structure meets the independence requirements of Order Nos. 888 and 2000.[184] In particular, the Commission has found that (1) the ISO is not controlled by a single market participant or class of market participant and is not controlled by the State of California, and (2) the ISO's Board selection process is consistent with the independence principles of Order Nos. 888 and 2000.[185] The Commission concluded that the ISO Board was able to function in an "impartial, non-parochial and nondiscriminatory manner."[186] Powerex offers no evidence that the expansion of the ISO's real-time energy market undermines any of these findings. In particular, it remains the case that no ISO board member is an employee of, affiliated with, or has a financial interest in, any market participant.

The Commission has found that the ISO satisfies all of the governance and responsiveness directives of Order No. 719.[187] First, with respect to inclusiveness, the Commission noted that ISO Board meetings are public so that any interested party (which will now include EIM Market Participants and stakeholders) can address the Board directly on individual decisional items before the Board takes action and can submit written comments to the Board at any time.[188] Second, the Commission found that the ISO's governance procedures and stakeholder process fairly balance diverse interests, in part by establishing a balanced process that allows for input from **all** interested stakeholder groups and provides *all* stakeholders with adequate opportunity

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184 *Cal. Indep. Sys. Operator Corp.,* 112 FERC ¶ 61,010 (2005).

185 *Id.* at PP 18-36.

186 *Id.* at P 36.

187 *Cal. Indep. Sys. Operator Corp.,* 133 FERC ¶ 61,067 (2010).

188 *Id.* at PP 46-48.

for involvement in vetting qualified candidates for the ISO's Board.[189] Third, the Commission found that the same Board procedures and practices ensure that when the Board considers a decisional item, it will have the benefit of any minority view that may be relevant.[190] Finally, the Commission concluded that the ISO's governance procedures and stakeholder process satisfy Order No. 719's ongoing responsiveness requirement because they allow for open dialogue between the ISO and stakeholders on an ongoing basis.[191]

Here, again, Powerex offers no evidence and identifies no facts that call into question the Commission's findings that the ISO is compliant with Order No. 719. The ISO's existing processes will allow Energy Imbalance Market stakeholders to have unfettered access to the Board, participation in ISO stakeholder meetings, and input on all market initiatives. Indeed, compared to the structure that exists today, the interim Energy Imbalance Market structure will in fact enhance access to the Board because the ISO is establishing a Transitional Committee to advise the Board on Energy Imbalance Market matters. The ISO also notes that the six stakeholder sectors that are represented on the Board Nominee Review Committee are broad enough to include all interested Energy Imbalance Market stakeholders.[192] Thus, there is no basis for the Commission to find that interim Energy Imbalance Market governance will violate Order No. 719's mandates.

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189 *Id.* at PP 49-52.

190 *Id.* at P 54.

191 *Id.* at PP 56-57.

192 The six stakeholder member classes are (1) transmission owners, (2) end users and retail energy providers, (3) public interest groups, (4) alternative energy providers, (5) transmission dependent utilities, and (6) generators and marketers.

Powerex ignores the fact that the Commission has not required revisions to the governance structure of ISOs and RTOs with each expansion of their markets. It did not require changes to the ISO's governance structure when the ISO expanded its footprint and markets beyond California with the addition of the Valley Electric Association as a new participating transmission owner. Similarly, the Commission did not require the MISO to change its board structure or membership when Entergy joined the MISO; it merely authorized the MISO to expand its Advisory Committee membership from 23 to 24 to accommodate a representative from the Southern Retail Authorities (the jurisdictional retail regulatory authorities in the states where Entergy operates).[193] Likewise, when the Commission authorized the MISO to expand the services it provides to include the provision of Reliability Coordination Service to certain non-MISO members, the Commission did not require MISO to change the structure or membership of its governing board to ensure that the interests of these parties were adequately represented.[194] Rather, the Commission accepted MISO's proposal to form a Reliability Coordination Technical Committee comprised of Reliability Service customers to advise the MISO board regarding Reliability Coordination Service matters.[195]

The ISO's proposed Transitional Committee will perform a similar advisory function to MISO's Advisory Committee and Reliability Coordination Technical Committee with respect to Energy Imbalance Market matters. Thus, the Commission's

193 *Midcontinent Indep. Sys. Operator, Inc.,* 145 FERC ¶ 61,131 (2013).

194 *Midwest Indep. Transmission Sys. Operator, Inc.,* 123 FERC ¶ 61,265 (2008).

195 *Id.* at PP 37-40.

decisions in MISO support a finding that no interim changes to the ISO's board membership or structure are necessary in connection with Energy Imbalance Market.

Powerex also fails to recognize that PacifiCorp has voluntarily agreed to participate in the Energy Imbalance Market and has accepted the proposed interim governance structure. Similarly, the ISO is not aware of any regulatory commission or public interest group in the states where PacifiCorp operates that opposes Energy Imbalance Market or the interim Energy Imbalance Market governance structure. Powerex provides no specific factual evidence showing that the interim Energy Imbalance Market governance structure is unjust, unreasonable or unduly discriminatory. If the ISO were to administer its tariff or otherwise act (or fail to act) in a manner that results in undue discrimination or unjust and unreasonable rates and/or terms of service with respect to Energy Imbalance Market, parties would have recourse at the Commission. In any event, Powerex's claims are mere speculation at this time and should not be countenanced by the Commission.

2. The ISO's Department Of Market Monitoring Is Independent.

Powerex objects to the fact that the ISO's Department of Market Monitoring ("DMM") will be the market monitor for the Energy Imbalance Market. Powerex claims that DMM fails to meet the independence requirements of Order No. 719.[196] Powerex states that the ISO and DMM are state entities and, as such, should not be permitted to impose market mitigation on entities located outside of the state.[197] Powerex also claims that DMM will not have a balanced perspective across the region because of its

196 Powerex at 9-11.

197 *Id.* at 11.

historical connection to the ISO.[198] Relatedly, Powerex alleges that DMM lacks extensive experience and knowledge of Western markets. For these reasons, Powerex urges the Commission to direct the ISO to issue a request for proposals to select an independent market monitor for the Energy Imbalance Market, similar to the structure that the Commission approved for PJM.[199]

As an initial matter, neither the ISO nor DMM are state entities. The ISO is a non-governmental, not-for-profit public benefit corporation. Likewise, the management and employees of the ISO and DMM are not state employees.

There is no basis for Powerex's claim that DMM fails to meet the independence requirements of Order No. 719. In that Order, the Commission specifically approved reliance on internal market monitoring units ("MMUs"), as long as they satisfy certain specified requirements to ensure their independence. Indeed, the Commission expressed no preference for any particular market monitoring structure and ruled that market monitoring units ("MMUs") could be internal, external or hybrid.[200] The Commission firmly rejected the notion that internal MMUs lack independence, stating "we have not detected any deficiency in performance by MMUs attributable to their structure."[201] In this regard, the Commission did not state or imply that an internal MMU might be acceptable for a single-state market, but not for a multi-state market.

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198 *Id.* at 13.

199 *Id.* at 14.

200 *Wholesale Competition in Regions with Organized Markets,* Order No. 719, 125 FERC ¶ 61,071 at P 326 (2008), *order on reh'g,* Order No. 719-A, 74 Fed. Reg. 37,776, PP 138-43 (2009).

201 Order No. 719-A at P 141.

To ensure the independence of an internal MMU, the Commission required that any internal MMU must report to the independent system operator or regional transmission organization board and not to management.[202] The Commission also required that independent system operators and regional transmission organizations include tariff provisions (1) obliging themselves to provide their MMUs with access to market data, resources, and personnel sufficient to enable them to carry out their functions, (2) granting MMUs full access to the ISO/RTO data base, and (3) granting MMUs exclusive control over any MMU created data.[203] The Commission also adopted minimum ethical standards to ensure that the MMU and its employees are wholly independent of any market participant.[204]

The Commission has found that the ISO's DMM meets the entire independence requirements of Order No. 719.[205] DMM reports to the ISO board and has a robust, Commission-approved code of conduct that ensures that DMM staff is independent of any individual market participant.[206] Powerex provides no evidence showing that DMM currently fails to satisfy the specific independence requirements of Order No. 719 or that it will fail to do so upon implementation of the Energy Imbalance Market. Nor is there anything inherent in the expansion of the ISO's real-time energy market that would raise questions about DMM's independence: DMM will continue to report to the ISO's Board; it will continue to have access to all necessary data, including data associated with the

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202 Order No. 719 at PP 339-41; Order No. 719-A at P 141.

203 Order No. 719 at P 328. Appendix P of the ISO tariff reflects these requirements.

204 Order No. 719 at P 384.

205 *Cal. Indep. Sys. Operator Corp.,* 129 FERC ¶ 61,157 (2009), *order on compliance,* 134 FERC ¶ 61,050 (2011).

206 ISO Tariff, Appendix P, Section 9.

expanded scope of the market, and its staff will remain independent of market participants. In short, the expansion of the ISO's real-time energy market changes no fact bearing on DMM's satisfaction of the independence requirements of Order No. 719.

Powerex's reference to the Commission's market monitoring order in PJM is inapt. In that proceeding, PJM agreed in a settlement filed with the Commission to institute an external market monitoring structure that reported to PJM's board, not PJM's management. The Commission did not unilaterally and involuntarily impose an external market monitoring structure on PJM.[207] The settlement arose in the context of a complaint proceeding in which certain parties alleged that PJM management was interfering with the independence of its internal market monitor.[208] Powerex does not allege that those circumstances exist here, nor do they. In any event, in Order No. 719, the Commission expressly declined to adopt as a "best practice" the MMU structure implemented by the PJM settlement.[209]

Powerex's suggestion that DMM is only charged with monitoring California markets is incorrect. DMM's mission is to "provide independent oversight and analysis of the CAISO Markets for the protection of consumers and Market Participants by the identification and reporting of market design flaws, potential market rule violations, and market power abuses."[210] Because DMM is charged with monitoring all "CAISO Markets," once PacifiCorp becomes part of the Energy Imbalance Market, DMM's monitoring responsibilities will cover that area as well. In particular, DMM will be

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207 *PJM Interconnection, LLC,* 143 FERC ¶ 61,090 (2013).

208 *Allegheny Elec. Coop, Inc. v. PJM Interconnection, LLC,* 120 FERC ¶ 61,254 (2007).

209 Order No. 719 at P 330.

210 ISO Tariff, Appendix P, Section 1.2.

charged with protecting consumers and market participants in all areas within the Energy Imbalance Market in connection with the real time market.

Powerex states that other independent system operators and regional transmission organizations have taken steps to ensure that one state's interests will not adversely impact other states and that the Commission similarly must impose a mechanism to ensure that DMM is independent from California. Powerex fails to explain how California will be pitting its interests against the interests of other states. Indeed, the relevant regulatory agencies in California and the states in which PacifiCorp operates support the Energy Imbalance Market.

The cases cited by Powerex to support its position are not on point and do not even pertain to market monitoring. The PJM case involved PJM's proposal to exempt certain resources developed pursuant to one state's procurement process from the minimum offer price rule applicable to capacity bids in PJM's forward capacity market.[211] The Commission ruled that caution must be exercised in exempting state subsidized resources from the minimum offer price rule because that could have a significant impact on prices in the wholesale capacity market.[212] Stated differently, state subsidized resources should not be permitted to bid into the forward capacity market at uneconomic prices, thereby disrupting the competitive price signals in the market.[213] In contrast, DMM cannot inappropriately disrupt competitive price signals in the Energy Imbalance Market or any other market. Under the ISO tariff, DMM cannot impose

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211 *PJM Interconnection LLC,* 143 FERC ¶ 61,090 (2013).

212 *Id.* at P 58.

213 *Id.* at P 54.

mitigation, does not administer the ISO tariff, and cannot impose penalties on market participants.[214] Further, DMM does not have the authority to compel the ISO to make tariff filings absent a complaint proceeding.[215]

Midwest Independent Transmission System Operator, Inc., cited by Powerex, likewise fails to support its position. There, the Commission rejected a request by the Organization of MISO States to grant it authority to endorse changes prior to MISO's filing of tariff amendments or to offer amendments on its own for separate filing to the Commission by MISO.[216] The Commission rejected the request stating that courts have held that states cannot compel public utilities to make section 205 filings.[217] This case actually undermines Powerex's claim because it demonstrates that neither the state of California nor DMM can compel the ISO to make specific tariff changes.

Finally, Powerex questions DMM's experience and understanding for purposes of serving as the market monitor for Energy Imbalance Market. However, DMM has the most extensive experience in monitoring the West, including western bilateral markets and trading that interacts with the ISO. Moreover, DMM, through its past monitoring efforts and its deep involvement in the Energy Imbalance Market development process, is intimately familiar with the Energy Imbalance Market design, which is based directly on the ISO's real time market. Upon Energy Imbalance Market implementation, DMM will continue to apply the core principles of market monitoring to the expanded real-time market and will continue to build on its experience with how regional markets interact

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214 ISO Tariff, App P, § 5.

215 *Id*. at Section 5.1.6.

216 122 FERC ¶ 61,283 at P 64 (2008).

217 *Id.* at PP 66-67.

with ISO markets. Also, under the ISO tariff, the ISO is obligated to provide DMM with access to the resources, personnel, and consulting assistance necessary to enable DMM to carry out its duties independently.[218] Powerex identifies no other market monitor in the west with experience comparable to DMM's.

M. Miscellaneous

1. The ISO Has Properly Proposed To Include Certain Matters in Business Practice Manuals.

Powerex contends that certain details that the ISO plans to provide in its business practice manuals should be in the tariff under the Commission's rule of reason.[219] The ISO believes that the detail included in proposed section 29 is consistent with the detail provided in the current ISO tariff.

In addition to its contentions regarding bid adders, discussed above in the context of the greenhouse gas provisions, Powerex identifies that following as items that should be included in the tariff rather than a business practice manual: (1) how ISO 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 ISO will derive an initial EIM Base Load Schedule for each EIM Entity (section 29.34(g)); (4) the manner for calculating the flexible ramping constraint requirement (section 29.34(m)(3)); (5) how ISO 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

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218 ISO Tariff, App. P, § 4.3.

219 Powerex at 85-87.

the ISO 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)). Each of these is discussed in turn below.

The reference to the business practice manual in section 29.11(11)(d)(4) does not pertain to the determination of exemption. That determination is already set forth in a straight-forward manner in the tariff.[220] Rather, the reference is to the determination of the Demand Forecast. The procedure for the preparation of the ISO's Demand Forecast is already described in a business practice manual. There is no basis to apply a different standard to the Energy Imbalance Market. In addition, the ISO will include references to existing business practices in the business practice manual for the Energy Imbalance Market.

Despite Powerex's claim, section 29.34(e)(3), which includes the balanced schedule requirement, does not contain a business practice manual reference. The validation process for such schedules, in section 29.34(j) does not call for an evaluation of whether to include resources that are subject to interruption or whose output is not controllable, so the ISO cannot determine what procedures Powerex is asserting must be in the tariff.

The determination of an initial EIM Base Load Schedule under section 29.34(g) is a technical matter. The tariff identifies the inputs necessary for determining the EIM Base Load Schedule and provides specific timelines by which those inputs must be provided. This is more than sufficient to satisfy the rule of reason, and the ISO can

[220] *See* Proposed §§ 29.34(g) and 29.34(l) (supporting the requirement that the base schedule be within +1% or -1% of the ISO demand forecast).

include additional information in the business practice manual for the Energy Imbalance Market. The ISO does not believe additional tariff revisions are necessary, but the ISO would be willing to specify in the tariff the specific point in time that the final binding base load schedule is determined, if the Commission directs it to do so.

The manners in which the ISO 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. Currently the ISO tariff provides for a flexible ramping requirement for the ISO markets. The ISO is simply extending these same requirements to EIM Entity balancing authority areas. There is no reason to require additional details in the ISO tariff with respect to requirements that already exist with respect to operation of the real-time market. In addition, the ISO will include references and other relevant information in the business practice manual for the Energy Imbalance Market.

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. There will be different Transmission Constraint relaxation parameters for different constraints. This is not the type of detail that the rule of reason requires in a tariff.

2. The ISO Intends to Develop and Report on Specific Energy Imbalance Market Metrics in Addition to its Real-Time Market Reports.

PG&E proposes that the ISO provide quarterly reports on the performance of the Energy Imbalance Market beginning with its implementation, and running through the first year after reinstatement of convergence bidding at the interties. PG&E recommends including (1) Resource participation level within each EIM Entity; (2) Transmission capacity made available to the Energy Imbalance Market by each EIM

Entity; and (3) Level of uplift costs incurred by each EIM Entity due to the Energy Imbalance Market.[221] Neighboring Systems also request quarterly reports.[222]

The ISO will prepare metrics to evaluate the benefits of the Energy Imbalance Market. For example, the ISO intends to propose systematic quantification of the Energy Imbalance Market benefits on congestion management as a redispatch cost savings. In addition, other market performance metrics will be updated to include parameters associated with the Energy Imbalance Market.[223] These metrics together will be tested as part of the market simulation and made public. Once operational, the ISO intends to thereafter report on these metrics as a regular part of its ongoing market performance reporting efforts. The Energy Imbalance Market, as an extension of the ISO real-time market, will include the reported metrics that will be published in connection with ISO market reports.[224] There is no need to impose additional Energy Imbalance Market reporting requirements.

Edison asks the Commission to require the ISO to present a plan to resolve the impact of EIM Base Schedule errors on virtual bidding uplift within a year of the

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221 PG&E at 8-10.

222 Neighboring Systems at 19.

223 The following are current reported metrics that are most relevant to the Energy Imbalance Market, which are included in the ISO's regular market reports: 1) locational marginal prices, 2) price convergence between markets (for Energy Imbalance Market consistency between 15 minute prices and 5 minute prices), 3) congestion constraints and associated costs, 4) congestion and imbalance offset costs, 5) bid cost recovery costs, 6) transfer capability and utilization, and 7) total flexibility costs.

224 The ISO continues to consider what interval to specifically report Energy Imbalance Market congestion management benefits, but at a minimum expects to discuss these metrics as a part of normal market performance review offered approximately every 6 weeks. The ISO will also likely incorporate these in its monthly market performance reports and metric catalog.

implementation of the Energy Imbalance Market.[225] This request is outside the scope of the Energy Imbalance Market. As discussed above, issues associated with virtual bidding have been addressed.[226] Edison's request is simply another attempt to try and require the ISO to address its underlying concerns with virtual bidding. Those arguments are far beyond the scope of the Energy Imbalance Market proposal.

3. There Is No Need for a Phase-In of the Energy Imbalance Market.

Portland believes that because of potential seams issues in an Energy Imbalance Market that spans three balancing authority areas, the ISO should limit the initial operation of the market to the two PacifiCorp balancing authority areas. Portland believes this would allow for more careful study of the impacts of the limited transfers between the two balancing authority areas and the impact on Bonneville's transmission system.[227] The ISO does not believe such a phase-in is necessary. The initial operation is limited as is—to three balancing authority areas with limited transfers between them. As discussed above, the ISO has worked with Bonneville to address any impact on its system and the parties have entered a memorandum of understanding. The market simulation will provide adequate opportunity to assess the operations. Moreover, the Energy Imbalance Market tariff authority provides the ISO with the ability to suspend operation of the market as necessary to address any unforeseen operational issues.

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225 Edison at 16.

226 See discussion *supra* at Section III(H)(4).

227 Portland at 11.

4. There Is a Stakeholder Process for Public Examination of Market Simulation Results.

Portland also requests that the Commission require the ISO to post detailed results of its market simulations, including underlying data, so that ISO stakeholders and other affected entities can weigh in on the potential impacts to the Western Interconnection and Western energy markets. It states that the ISO should hold additional stakeholder meetings prior to the effective go-live date to ensure that operational and regional stability is met and that no unintended market issues arise that may affect reliability.[228]

No Commission directive is necessary for this purpose. The ISO will conduct a market simulation starting on July 8, 2014 and continuing into August and September to allow the EIM Entity, other EIM Market Participants, other market participants and interested stakeholders ample opportunity to review results of both structured and unstructured scenarios. Structured scenarios will demonstrate specific, pre-defined market scenarios and are currently posted on the ISO's public website.[229] Unstructured scenarios will allow the PacifiCorp and other market participants to submit input data based on their testing needs to validate the Energy Imbalance Market results. The ISO will make market simulation data available via specified market systems. Technical specifications for the systems can be found on the public release planning page.[230]

The ISO will host a market simulation kick off meeting in late June or early July and continue to hold regular stakeholder calls during the market simulation period. The

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228 Portland at 6.

229 *See* Full Network Model Expansion Structured Scenarios.

230 *See* http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx.

stakeholder calls during market simulation are typically twice a week, but may be increased to three or four times a week if needed to communicate with external parties. Additionally, the ISO will continue to provide implementation updates through the Release Users Group which meets bi-weekly on Tuesdays at 10:00. Prospective EIM Market Participants can attend these forums and can view public data on OASIS.

5. Consolidation is Unwarranted

Utah moved for consolidation of this proceeding with the PacifiCorp's proposed tariff amendments to implement the Energy Imbalance Market.[231] The ISO does not believe consolidation of the proceedings is necessary to consider the issues presented by both filings and their interactions. The filings were aligned in a manner to facilitate concurrent review and consideration by the Commission. Accordingly, the ISO respectfully requests that the motion to consolidate by UAMPS be rejected.

IV. CONCLUSION

For the reasons discussed above, the Commission should accept the ISO Energy Imbalance Market as filed, except for those compliance matters discussed above.

[231] Utah at 5. Tri-State similarly asserts that the two filings be "considered concurrently". Tri-State at 3-4.

Respectfully submitted,

By: *<u>/s/John C. Anders</u>*

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Dated: April 15, 2014

Exhibit

11.25.2.1 Flexible Ramping Constraint Derived Price

(a) For each applicable fifteen-minute FMM interval, the Flexible Ramping Constraint Derived Price is equal to the lesser of—

(1) $800/MWh; or

(2) the greater of

(i) the Real-Time ASMP for Spinning Reserves for the applicable FMM Interval; or

(ii) the total Flexible Ramping Constraint Shadow Price, ~~but not less than zero.~~

but not less than zero.

(b) The CAISO will determine the total Flexible Ramping Constraint Shadow Price as the sum of the Flexible Ramping Constraint Shadow Prices for the groupings and individual Balancing Authority Areas in the EIM Area in which the resource is deemed to have contributed to the constraint, minus seventy-five (75) percent of the greater of

(1) zero (0), or

(2) the Real-Time System Marginal Energy Cost, calculated as the simple average of the System Marginal Energy Cost for each of the three five-minute RTD intervals in the applicable FMM interval.

11.25.4 Apportionment of Flexible Ramping Constraint Costs

(a) The CAISO will determine the Flexible Ramping Constraint costs for each constraint as the product of—

(1) the resource-specific total Flexible Ramping Constraint costs, calculated as the total compensation in Section 11.25.2(b), net of rescission of payments, and

(2) ~~the ratio of the Flexible Ramping Constraint Shadow Price to the total Flexible Ramping Constraint Shadow Price, determined as described in Section 11.25.2.1(b)~~ the ratio of each Flexible Ramping Constraint Shadow Price to the sum of the Flexible Ramping Constraint Shadow Prices for the groupings and individual Balancing Authority Areas in the EIM Area in which the resource is deemed to have contributed to the constraint.

(b) For each constraint and each Balancing Authority Area in the EIM Area, the CAISO will determine the Flexible Ramping Constraint costs attributable to that Balancing Authority Area for which the applicable constraint(s) were binding in the applicable interval, based on the ratio of the Balancing Authority Area's requirement to its contribution to the individual constraint or group of constraints to which that Balancing Authority Area contributes.

(c) The CAISO will determine each Balancing Authority Area's apportionment of Flexible Ramping Constraint costs as the sum for that Balancing Authority Area of the amounts determined in Section 11.25.4(b).

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon the parties listed on the official service list in the captioned proceeding, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Washington, D.C., this 15th day of April, 2014.

/s/ Michael E. Ward

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