

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

<b>California Independent System</b>	)	<b>Docket No. ER15-1919-000</b>
<b>Operator Corporation</b>	)	<b>Docket No. ER15-1919-001</b>

**ANSWER TO COMMENTS**

The California Independent System Operator Corporation (“CAISO”) hereby respectfully submits its answer to the comments filed in the above-identified dockets.<sup>1</sup> These proceedings concern the CAISO’s filing of proposed modifications to the CAISO tariff provisions governing the operation of the CAISO’s Energy Imbalance Market. The modifications will enhance functionality, accommodate participation of additional Balancing Authority Areas, address issues encountered during the first year of operations, and comply with certain Commission directives in its order approving implementation of the Energy Imbalance Market.

**I. Background and Introduction**

On June 15, 2015, the CAISO filed proposed modifications to the CAISO tariff provisions governing the operation of the CAISO’s Energy Imbalance Market that would (1) allow the use of available transfer capability for EIM transfers, (2) provide a cost based approach for greenhouse gas bidding by EIM participating resources and a means for such resources to avoid being dispatched to serve load in California, (3) align the EIM administrative charge with the grid management charge, and (4) include

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<sup>1</sup> The ISO submits this answer pursuant to Rule 213 of the Commission’s Rules of Practice and Procedure, 18 C.F.R. § 385.213.

additional elements for the evaluation of resource sufficiency. On June 25, 2015, the CAISO submitted an errata to add a section of the transmittal letter (section III.E of the transmittal as corrected) that described one of the tariff changes that had been inadvertently omitted during editing.<sup>2</sup> On July 1, 2015, the CAISO submitted an amendment to the original filing to revise the requested effective date of a single tariff provision proposed in the June 15 filing.<sup>3</sup>

Eleven parties submitted motions to intervene without comment to the June 15 filing. One additional party submitted motions to intervene without comment on the June 15 filing in response the June 25 errata. Two parties filed an intervention without comment in response to the July 1 amendment. No other intervention or comment was submitted in response to the July 1 amendment. The ISO does not object to any of these interventions.

Pacific Gas and Electric Company (“PG&E”) submitted comments to the June 15 filing and the June 25 errata on the date noticed for comment on the June 15 filing. The Transmission Agency of Northern California (“TANC”) submitted comments to the June 15 filing on the date noticed for comments. NV Energy submitted comments in support of the June 15 filing on the date noticed for comments on the June 25 errata.

Southern California Edison Company submitted comments supporting and questioning elements of the June 15 filing on the date noticed for comments on the June 25 errata. PacifiCorp submitted comments generally in support of the June 15

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<sup>2</sup> See Docket No. ER15-1919-000 (noticing that comments on the errata are due July 16, 2015).

<sup>3</sup> See Docket No. ER15-1919-001 (including an errata noticing that comments on the amended effective date are due July 16, 2015).

filing on the date noticed for comments on the June 25 errata, and including comments questioning one element of the proposal. Powerex filed comments concerning the June 15 filing on the date noticed for comments on the June 25 errata, which support elements of the proposal but also question the same element of the CAISO's proposal noted by PacifiCorp.<sup>4</sup>

PG&E is critical of the CAISO's proposal to apply the resource sufficiency test to the CAISO balancing authority area. PG&E also expresses concern about the calculation of locational marginal prices once the proposed EIM transfer costs are included. Lastly, PG&E questions whether the system marginal energy cost is the appropriate price for determining the financial value of EIM transfers in the real time imbalance energy offset calculation. TANC requests additional reporting requirements based on its concern that that EIM transfers supported by available transfer capability could increase unscheduled flow on non-EIM participant transmission systems. The CAISO responds to these comments below.

Powerex requests that the Commission direct the CAISO to revise and improve its flexible ramping sufficiency enhancement proposal to take into account the actual performance of interchange schedules when considering adjustments to the requirements.<sup>5</sup> PacifiCorp also expresses concern with respect to this element of the CAISO's proposal and requests that the Commission direct the CAISO to re-evaluate its methodology once a full year's worth of scheduling error data has been collected.<sup>6</sup> SCE

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<sup>4</sup> There was no protest of the proposed tariff changes.

<sup>5</sup> Powerex at 5-9.

<sup>6</sup> PacifiCorp at 7-8.

prefers that a simple greenhouse gas bid adder flag be implemented and raises a concern about any potential for non-participating resources to receive bid-cost recovery.

The CAISO received the comments from Powerex, PacifiCorp and SCE on the date noticed for comments on the June 25 errata, not the date noticed for comments on the June 15 proposal, and consideration of a response is under review. The CAISO will file a supplemental answer to address these comments as soon as possible, and in the meantime submits this answer.

## **II. Answer**

All but one of the matters raised in the comments answered here do not question the justness or reasonableness of the proposed changes, but rather request additional transparency or reporting obligations from the CAISO. Only PG&E's comment concerning the application of the resource sufficiency evaluation to the CAISO balancing authority area questions the justness and reasonableness of a proposed change. As explained more fully below, the Commission should accept the proposed changes without condition or modification and should not impose any additional reporting requirements.

### **A. Application of the Resource Sufficiency Evaluation to the CAISO Balancing Authority Area Maintains the Understanding Reached with Stakeholders and Establishes Parity.**

PG&E points out the robust resource adequacy requirements imposed on load serving entities in the CAISO balancing authority area and contrasts those requirements with the lack of comparable resource adequacy requirements in the EIM entity balancing authority areas.<sup>7</sup> PG&E argues that the proposed application of a resource

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<sup>7</sup> PG&E at 4-5.

sufficiency evaluation in the CAISO balancing authority area is unnecessarily duplicative of the resource adequacy requirements.<sup>8</sup> PG&E also contends that failure of the resource sufficiency evaluation by the CAISO balancing authority area could reduce the anticipated inter-regional dispatch benefits of the Energy Imbalance Market.<sup>9</sup>

The CAISO agrees that under most circumstances its existing resource adequacy requirements should ensure that the CAISO balancing authority area would pass the resource sufficiency evaluation currently imposed upon EIM entity balancing authority areas. The CAISO further agrees that failure of the resource sufficiency evaluation by the CAISO balancing authority area could reduce the inter-regional dispatch benefits during those intervals, as would be the case when any EIM entity balancing authority area fails the test. However, the CAISO submits that none of these points outweigh the principle that the CAISO balancing authority area should be treated similarly to EIM entity balancing authority areas with respect to resource sufficiency in the operation of the Energy Imbalance Market.

All resource sufficient balancing authorities in the EIM area are entitled to share in the diversity benefits of the Energy Imbalance Market. The corollary to this should be that each of them is subject to the same requirements in order to receive the benefit. The CAISO proposed, and stakeholders generally support, that the CAISO be subject to the same resource sufficiency evaluation as other balancing authorities in the EIM area. This is nothing more than simple parity. The CAISO considered PG&E's concerns during the stakeholder process, but concluded that there were insufficient grounds to

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<sup>8</sup> *Id.*

<sup>9</sup> *Id.* at 6.

maintain an exemption of the CAISO balancing authority area. PG&E's concerns are insufficient to justify rejection of the understanding among stakeholders that the CAISO should be subject to the resource sufficiency evaluation.

**B. The CAISO's Planned Market Simulation Evaluation of EIM Transfer Cost Impacts on Locational Marginal Prices Will Provide Sufficient Transparency into these Determinations.**

PG&E agrees with the objective of the CAISO's proposal to include a small EIM transfer cost to facilitate the determination of the optimum EIM transfer path through the market optimization.<sup>10</sup> Nonetheless, PG&E is concerned that the CAISO has not sufficiently evaluated the impact that EIM transfer cost may have on locational marginal prices and suggests that the Commission direct the CAISO to engage in a stakeholder process that demonstrates how its proposal affects locational marginal prices.<sup>11</sup> PG&E also believes that the CAISO should include an associated requirement in the EIM readiness criteria that this element of the market design be ready prior to implementation of the next EIM entity, which, in this case, would be NV Energy.<sup>12</sup>

As PG&E recognizes, the CAISO will determine the appropriate level of the EIM transfer costs during market simulation and explain its reasoning for the determination. At this time the CAISO expects to provide stakeholders with information concerning the results of market simulation generally and to more specifically describe the results of any tests associated with the EIM transfer cost proposal. The CAISO will be prepared

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<sup>10</sup> *Id.* at 7.

<sup>11</sup> *Id.*

<sup>12</sup> *Id.*

to address these results with stakeholders during its regular market simulation results meetings.

The CAISO does not believe it is necessary or appropriate to require the CAISO to include a readiness criteria associated with this functionality. The Commission focused its directives concerning the readiness requirements and criteria on the systems and processes of the EIM entity.<sup>13</sup> The CAISO's stakeholder process to develop the readiness criteria, in which PG&E was an active participant, focused on the readiness of the EIM entity systems and processes as directed by the Commission. PG&E has not justified any change to that approach here nor explained why that stakeholder process was not an appropriate forum to discuss this topic. Adding additional criteria at this time through this proceeding would circumvent the stakeholder process, is unnecessary, and inconsistent with the Commission's directive. The CAISO's normal market simulation procedures combined with the EIM readiness requirements as presently contemplated are sufficient.

The CAISO will include details concerning the identified minimum transfer cost in the business practice manual for the Energy Imbalance Market as well as whether or not the identified transfer cost needs to be different for any specific EIM transfer schedule, such as a fifteen-minute market only schedule or a real-time market schedule. This, combined with the open market simulation process, should provide the transparency PG&E seeks.

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<sup>13</sup> See *Cal. Indep. Sys. Operator Corp.*, 150 FERC ¶ 61,191 (2015) at P 34 (directing the CAISO to include readiness requirements in its tariff and develop readiness criteria in collaboration with stakeholders); see also CAISO's pending compliance filing (adding two new paragraphs to subsection 29.2(b) of the CAISO tariff to implement the Commission's directives).

**C. The CAISO Commits to Providing Additional Details on the Use of the System Marginal Energy Cost in the Business Practice Manual for the Energy Imbalance Market.**

PG&E expresses concern that the CAISO did not decide to use the system marginal energy cost for purposes of determining the financial value of EIM transfers during the policy development portion of the stakeholder process.<sup>14</sup> The CAISO admits that its decision to change from the proposed default generation aggregation point to the system marginal energy costs when determining the financial value of EIM transfers occurred during the tariff development. It was only during the concurrent year-one enhancements implementation activities, particularly the associated settlement system configuration changes, that the CAISO identified a potential double counting of real-time congestion offset costs as a potential problem if the default generation aggregation price proposal was implemented. By that time, it was too late to address as part of the policy development process.

There are two settlement calculations that must be reconciled without the direct financial value of EIM transfers – the real-time congestion offset and real-time marginal losses. Because the CAISO calculates the real-time congestion offset for each EIM entity balancing authority area according to constraints located within each balancing authority area, the calculation already includes the cost of congestion from resources dispatched and settled in the EIM area. At the same time, the CAISO sums up losses for the individual EIM entity balancing authority areas so that too is accounted for. This leaves only the system marginal energy costs and green-house gas adders for the real-time imbalance energy offset settlement. Because the other components of the

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<sup>14</sup> *Id.* at 8-9.

locational marginal price are thus taken care of in the settlement of the these neutrality accounts, it would not be appropriate to include them in addition to the system marginal energy costs for the financial value of the EIM transfer in the real-time imbalance energy offset. Using the default generation aggregation price would require settlement configuration modifications to first back out the congestion component of the other charges before including the default aggregation generation price. This not only would require a significant effort but it would produce essentially the same result as the use of just the system marginal energy cost in the first instance.

Once the CAISO recognized the advantages of using the system marginal energy cost, the CAISO informed stakeholders at the next opportunity to do so – the tariff development stakeholder process. The timing of the decision does not undermine the rationale for the proposal as explained by the CAISO, and PG&E does not question the substance of the proposal. PG&E only asks for additional confirmation that this is the appropriate value for determining the financial value of EIM transfers in the real-time imbalance energy offset cost calculations. No Commission directive is necessary to resolve this request by PG&E.

The CAISO commits to providing more information on this issue during the process of revising the business practice manual for the Energy Imbalance Market and through the planned market simulation settlement results meetings. The business practice manual for the settlements changes associated with each of these charge codes has been posted for stakeholder comment and includes the associated financial calculations and determinations. These settlement configurations do not include the marginal cost of congestion calculation by balancing authority area which are produced

by the market operations and not the settlement systems, but the CAISO will provide the congestion offset by balancing authority area through the settlement statements issued during market simulation, as during the PacifiCorp market simulation.

Accordingly, no further reporting obligation is warranted.

**D. TANC's Concerns Were Addressed in Prior Commission Orders and No Additional Reporting Obligation is Necessary.**

TANC is concerned that the CAISO's proposal to use available transfer capability for EIM transfers will increase loop flow within the Western Electricity Coordinating Council footprint.<sup>15</sup> TANC explains that its comments were not specifically addressed in the stakeholder process and requests that the Commission impose additional reporting obligations upon the CAISO and hold open this docket to ensure that this aspect of the Energy Imbalance Market design remains just and reasonable.<sup>16</sup> Notably, TANC does not object to the proposal or question the justness and reasonableness of the proposal.

The CAISO provided stakeholders with a technical paper that explained the formulations for the proposed EIM transfer changes.<sup>17</sup> The CAISO discussed this information with stakeholders. TANC did not at that time present any specific examples of how the proposed formulation could violate inertia scheduling limits or increase unscheduled flows during the stakeholder process and TANC does not do so now. There is thus no basis for any additional reporting requirements.

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<sup>15</sup> TANC at 9.

<sup>16</sup> *Id.* At 10-11.

<sup>17</sup> The [Energy Transfer Scheduling](#) technical paper is available on the CAISO's website. The CAISO will include similar and up to date information on this subject in the business practice manual for the Energy Imbalance Market.

As noted above in response to PG&E's comments, the CAISO intends to test the use of available transfer capability for EIM transfers during market simulation and to provide stakeholders with additional information concerning this feature. Further, if the CAISO were to identify any shortcoming of the planned functionality to manage EIM transfers within inter-tie scheduling limits or other network model constraints enforced by the CAISO, the CAISO would attempt to resolve such issues during market simulation and would take appropriate actions if it were unable to do so.

The Commission has ruled that established unscheduled procedures administered by the WECC are the appropriate mechanisms for managing unscheduled flows within the WECC footprint. The June 19 order underlying the Energy Imbalance Market accepted the premise that the CAISO and each EIM Entity would follow established WECC practices for management of unscheduled flow.<sup>18</sup> This is what the CAISO tariff currently requires.<sup>19</sup> TANC's suggestion that the June 19 order accepting the NV Energy tariff provisions to implement the Energy Imbalance Market somehow reopens this question because it does not directly address this issue fails to recognize prior Commission precedent on this point. TANC's unsupported concerns do not call into question precedent or justify the imposition of additional reporting requirements.

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<sup>18</sup> See *Cal. Indep. Sys. Operator Corp.*, 147 FERC ¶ 61,231 (2014) at P. 268 (conditionally accepting tariff revisions to implement Energy Imbalance Market); *Cal. Indep. Sys. Operator Corp.*, 149 FERC ¶ 61,058 (2014) (order denying requests for rehearing, granting in part and denying in part requests for clarification, and conditionally accepting tariff revisions on compliance with regard to order listed above); Commission Letter Order, 149 FERC ¶ 61,005 (2014) (order granting CAISO request to extend effective date of Energy Imbalance Market tariff revisions from September 23, 2014, to October 24, 2014, for trading day November 1, 2014).

<sup>19</sup> CAISO Tariff, section 29.7(k).

There is no need for further Commission action and certainly no reason to hold open this proceeding.

### **III. Conclusion**

For the reasons explained above and in the ISO's June 15, June 25, and July 1 filings in these proceedings, the Commission should accept the proposed tariff revisions as filed and without condition.

Respectfully submitted,

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## CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon all of the parties listed on the official service list for the above-referenced 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 Folsom, CA this 17th day of July, 2015.

*/s/ Anna Pascuzzo*

Anna Pascuzzo