ORA



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THE OFFICE OF RATEPAYER ADVOCATES' COMMENTS ON THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR'S JULY 31, 2017 CONSOLIDATED ENERGY IMBALANCE MARKET INITIATIVES FROM 2017 ROADMAP STRAW PROPOSAL AND AUGUST 7, 2017 STAKEHOLDER PRESENTATION

August 17, 2017

The Office of Ratepayer Advocates (ORA) is the independent consumer advocate within the California Public Utilities Commission (CPUC), with a mandate to obtain the lowest possible rates for utility services consistent with reliable and safe service levels, and the state's environmental goals. The following are ORA's comments and recommendations on the status of the California Independent System Operator's (CAISO) July 31, 2017 *Consolidated Energy Imbalance Market (EIM) Initiatives from 2017 Roadmap Straw Proposal* (Straw Proposal) and August 7, 2017 stakeholder presentation on the (1) Third Party Transmission Contribution for EIM transfers; (2) Management of Bilateral Schedule Changes in the EIM; and (3) Equitable Sharing of Wheeling Benefits.¹

Third Party Transmission Contribution for EIM transfers

ORA supports the removal of this issue from consideration at this time because it is not clear the benefits of third party transmission outweigh the proposed compensation for third party transmission.² Numerous parties, including ORA, questioned the need to develop a mechanism to compensate third party transmission owners as contemplated by the CAISO.³

Management of Bilateral Schedule Changes in the EIM

ORA supports the CAISO's determination to not revise the management of bilateral schedule changes in the EIM.^{$\frac{4}{2}$}

 $\frac{1}{2}$ The Consolidated EIM Initiatives also include "New EIM Functionality." ORA has no comments on this topic at this time.

² Consolidated Energy Imbalance Market (EIM) Initiatives from 2017 Roadmap Straw Proposal, California Independent System Operator's (CAISO) July 31, 2017 (Straw Proposal), pp. 4-5.

³ See e.g., The Office Of Ratepayer Advocates' Comments on the California Independent System Operator Corporation's June 13, 2017, Consolidated Energy Imbalance Market Initiatives from 2017 Roadmap Issue Paper (ORA EIM Issue Paper Comments) pp. 3-4; Powerex Comments on the California Independent System Operator Corporation's June 13, 2017, Consolidated Energy Imbalance Market Initiatives from 2017 Roadmap Issue Paper, July 3, 2017, pp.2-4; PacifiCorp Comments on the California Independent System Operator Corporation's June 13, 2017, Consolidated Energy Imbalance Market Initiatives from 2017 Roadmap Issue Paper, July 3, 2017, pp.2-4; PacifiCorp Comments on the Market Initiatives from 2017 Roadmap Issue Paper, June 30, 2017, pp.1-3.

 $\frac{4}{2}$ The CAISO raised the possibility of extending its existing wheeling bid functionality to the EIM, in order to allow market participants to manage exposure to imbalance settlements for bilateral schedule changes made after submission of base schedules to the EIM entity prior to final submission by the EIM entity to the CAISO. But as the CAISO has noted, "the majority of stakeholder feedback was neutral."

Equitable Sharing of Wheeling Benefits

Background

The CAISO observes that some EIM transfers originate in one Balancing Authority Area (BAA), wheel-through another BAA, and sinks in a third BAA and asks:

Should the source and sink BAAs accrue the benefits of the transaction (current EIM structure) or should the wheel through EIM BAA share the benefits in return for facilitating the transfer?"⁵

Currently, there are two financial outcomes of this type of wheel-through transaction. If there is congestion, the EIM BAA that facilitates the wheel-through transaction receives congestion revenue. If there is no congestion, then the EIM BAA that facilitates the wheel-through transaction receives no congestion revenue.

CAISO's Proposal

CAISO's Straw Proposal considers options to revise the manner in which the current EIM structure shares benefits in order to "equitably share benefits between the source, the wheel-through, and the sink BAAs."⁶

Data Analysis

To evaluate the relative amount of wheel-through transactions as compared to transactions in which the EIM BAA was either the source or sink of the energy, the CAISO analyzed net wheeling activity using 5-minute scheduling data for all EIM transfer scheduling resources in the EIM footprint.⁷ The CAISO used data beginning in November 2016, the date of the most recent EIM expansion,⁸ and ending July 17, 2017.⁹ The results of this analysis demonstrated that the amount of wheeling varies across EIM BAAs,¹⁰ ranging from no wheeling transactions in Puget Sound Energy's BAA to nearly 800,000 megawatt hour (MWH) in Arizona Public Services'

Consolidated EIM Initiatives Straw Proposal, pp. 6-12; August 7, 2017 Stakeholder Presentation (EIM Initiatives Straw Proposal Stakeholder Presentation), slide 14.

 $\frac{5}{5}$ Straw Proposal, p. 12. The Issue Paper acknowledged that in some instances, the wheel-through BAAs receives congestion revenue from the wheel-through transactions. EIM Issue Paper, p. 13.

⁶ Straw Proposal, p. 13. The two options are ex-post payment based on the amount of net wheeling that occurs or implementing a hurdle rate that can be incorporated into the market.

⁷ Straw Proposal, p.14.

⁸ Straw Proposal, p.14 and fn. 8.

⁹ California ISO (CAISO) Consolidated Energy Imbalance Market Initiatives Straw Proposal, Margaret Miller, Steve Greenleaf, and Mike McGuffin, Customized Energy Solutions Market IQ, August 7, 2017(CES Summary of EIM Initiatives Straw Proposal), p. 3; Straw Proposal, p.14 and fn. 8. While not noted in the straw proposal, during the August 7 stakeholder call the CAISO indicated the July data was for the first half of July.

¹⁰ Straw Proposal, p.17 and Appendices.

BAA.¹¹ The CAISO acknowledged that the variance is expected given the locations of heavy demand and concentrated resources within the EIM, and the likelihood of the EIM to change over time with potentially more entities joining the EIM.¹² The CAISO compared each BAA's total net exports and total net imports with its total net wheels.¹³ The results showed that "all EIM BAAs are importing and exporting more than they are facilitating wheeling."¹⁴ These results do not provide any information on the import and export transaction values to determine their benefits to EIM BAAs.

ORA's Recommendations

The results of this analysis do not support the need to revise the current EIM structure in order to "equitably share benefits." ORA recommends that the CAISO continue to study this issue and incorporate wheeling activity into its EIM benefit reports to monitor if a problem exists. The EIM benefit reports, which are released on a quarterly basis, quantify the benefits from the ability to transfer energy between EIM BAAs through the CAISO's Security Constrained Economic Dispatch. These benefit reports should be augmented with more detailed information regarding the benefits that result from access to low cost energy, and energy that the BAAs are paid to transport through the EIM, as well as access to more efficient flexible resources in other BAAs. The CAISO acknowledged that its analysis of the wheel-through transactions does not consider these benefits, or the cost or average price of the transactions it analyzed.¹⁵

The CAISO's analysis was also based on less than nine months of data in a year with unusual hydrological conditions.¹⁶ This is an insufficient data set to support a revision to the current EIM benefit's structure. It is clear from the charts shown in the Straw proposal appendices that the amounts of net imports, net exports and wheels vary dramatically across the nine month study period for each of the EIM BAAs. The conclusions to be drawn from the data analysis could be quite different if a data set covering a longer period and more representative of the typical conditions were used.

¹⁵ August 7, 2017 stakeholder meeting on EIM Initiatives Straw Proposal; CES Summary of EIM Initiatives Straw Proposal, p. 7.

¹¹ Straw Proposal, p. 20, Table 3.

¹² Straw Proposal, p. 16.

¹³ Straw Proposal, p.18, Figure 6.

¹⁴ Straw Proposal, p.18.

¹⁶ Western Energy Imbalance Market, Briefing on supply conditions, EIM Governing Body Meeting General Session April 19, 2017, Mark Rothleder, slides 4-8, and 2017 Summer Loads and Resources Assessment, CAISO, May 11, 2017 p.5 "Hydro conditions for 2017 have vastly improved over recent years with the statewide average snow water content measuring, as of April 28, 2017, at 158 percent of the April 1 average when snowpack typically reaches its maximum level for the year and statewide precipitation is close to the wettest year recorded. This abundance of rain has nearly all reservoirs near capacity and needing to spill water to make room for spring snow runoff. California hydroelectric capability will be above normal for 2017 providing greater than normal hydro energy during the spring and summer seasons."

According to the CAISO, "[e]quitable sharing of benefits maximizes the amount of transmission available to support EIM transfers."¹⁷ The CAISO presented no support for this assertion, and no evidence that EIM BAAs are withholding transmission capacity that facilitates wheeling. Instead, the CAISO's limited analysis demonstrates that "all EIM BAAs are importing and exporting more than they are facilitating wheeling."¹⁸ The data presented demonstrates that EIM BAAs are participating in wheel through transactions under the existing EIM benefits framework. This makes sense, since the same transmission an EIM BAA utilizes for wheel-through transactions may also be utilized by the EIM BAA to facilitate EIM transfers between them and other EIM BAAs, as well as optimal dispatch of resources within its own BAA. It would be premature to move forward with either of the CAISO's proposed solutions in the absence of evidence that EIM BAAs are not benefiting from their participation in the EIM.

ORA, therefore, recommends that the CAISO further analyze¹⁹ and monitor wheel-through activity along with EIM benefits from import and export activity as the EIM evolves and share this analysis with stakeholders.

If you have any questions or comments, please contact Kanya Dorland at Kanya.Dorland@cpuc.ca.gov or (415) 703-1374.

¹⁷ EIM Initiatives Straw Proposal Stakeholder Presentation, slide 32.

¹⁸ Straw Proposal, p. 18.

¹⁹ ORA's comments on the Issue Paper recommended that the CAISO further evaluate the EIM's net benefits to BAAs that facilitate wheel-through transactions to determine if additional compensation is necessary. ORA recommended that the CAISO evaluate whether any EIM BAAs that have supported wheel-through transactions when congestion does not occur have experienced a significant loss of revenue that is not offset by EIM benefits such as energy cost savings. ORA EIM Issue Paper Comments, p. 4.