

Stakeholder Comments

Energy Imbalance Market

Submitted by	Company	Date Submitted
Gary Lawson Gary.Lawson@smud.org (916) 732-5802	Sacramento Municipal Utility District (SMUD)	April 19, 2013, to EIM@caiso.com

The Sacramento Municipal Utility District (SMUD) appreciates the opportunity to provide its comments to the California Independent System Operator Corporation’s (CAISO) April 4, 2013 “Energy Imbalance Market (EIM) Design Straw Proposal and Issue Paper” (Straw Proposal).

1. Non-CAISO Balancing Authorities (BA)

The Straw Proposal generally discusses non-CAISO Balancing Authority (BA) responsibilities and portrays other BAs as “trying to manage imbalances in real-time with manual dispatches and extra power reserves.” Straw Proposal at 1. This statement, and others of this sort are self serving, and discounts the fact that a BA is *required* to manage imbalances in real-time. For instance, SMUD, as the operator of the Balancing Authority of Northern California (BANC) BA, manages imbalances under the North American Electric Reliability Corporation (NERC) mandatory reliability standards. BANC is responsible for compliance with both Control Performance Standards (CPS) 1 and CPS 2, which require the BA to maintain interconnection steady-state frequency within defined limits by balancing real power demand and supply in real-time. Further, SMUD operates a state-of-the-art control room for BANC operations, which automates dispatch, except under certain exceptional circumstances – not dissimilar to the CAISO.

2. Reliability and EIM

The CAISO states that the CAISO EIM model “[e]nhances reliability through real-time visibility and situational awareness of resources and transmission across the CAISO and EIM footprint.” *Id.* at 2. EIM is primarily an economic, not a reliability, tool. EIM bids, both for resources and loads, are voluntary and any deliveries are transacted over non-firm transmission. Indeed, should participants fail to come to the market fully resourced (lean on the market), the results could be quite the opposite. Additionally, real-time visibility and situational awareness of resources and transmission already exist between the CAISO and BANC BAs, where SMUD resides, independent of an EIM. Besides our long-standing exchange with the CAISO of real-time operational information (over 830 data points), which began when SMUD was the BA and continues with SMUD operating the BANC BA, our obligations to do so are clearly spelled out in

the applicable NERC reliability standards. Thus, the CAISO and SMUD have a robust exchange of data and there is nearly full visibility across both of our systems with or without an EIM.

3. Load Forecast

The Straw Proposal strongly favors that the EIM Participant and/or non-CAISO EIM Entity utilize the CAISO for its load forecast to avoid what might amount to significant under- and overscheduling charges. *Id.* at 20. It is a question, however, as to which entity, the CAISO or the entity participating in the EIM, are best-suited to provide such a forecast. At this stage, due to the complexity of an EIM participant's Load Schedule, a BA's reliability required Load Forecast and the EIM Operator's Load Forecast process should not be unduly incited in one direction or another in a voluntary market. Under some circumstances, it might very well be that the EIM Participant or non-CAISO EIM Entity is better able to provide an accurate forecast. SMUD recognizes that there needs to be accountability levied towards those that choose to provide their own forecast, however, it merely observes that the proposed structure may only leave one choice, and that choice might not be the most accurate or provide the best optimization of an EIM.

4. Transmission Service

While the Straw Proposal proposes no charge for EIM use of as-available transmission (*id.* at 47), SMUD believes that it is important to establish some form of transmission service charge for EIM use of transmission.

During the April 11th stakeholder meeting, the CAISO indicated that it based its decision to defer consideration of a transmission charge on the assumption that there would only be limited (100 MW) EIM transactions between itself and PacifiCorp. The CAISO proposed that it address this issue later if additional participants sign up. SMUD has a couple of concerns with this approach. First, if the CAISO has any indication that other entities may in fact join, the CAISO is only delaying the inevitable – and this is no minor issue. Entities that may consider joining the EIM need a level of price certainty that extends beyond just the initial entry into the market. If prices will inevitably include a transmission service charge, and therefore increase, perhaps substantially, this needs to be part of the program design and cost projection from the beginning.

Second, the March 13, 2013, "PacifiCorp-ISO Energy Imbalance Market Benefits" document provided to stakeholders uses a range of assumptions, including 100 MW, 400 MW and 800 MW, with respect to EIM transfers between the CAISO and PacifiCorp. It would appear therefore that higher levels of transfers have at least been anticipated. If so, some methodology and rate should be considered during this process. Failure to address this mechanism up front will make it harder to address once EIM is implemented.

5. Governance

SMUD recognizes that market rule oversight and structure are open issues that still need development. However, there are a couple of overriding principles that SMUD encourages the CAISO to consider during development. First, it is important that the governance structure be sustainable if the EIM grows and more participants join. If there is a possibility that the governance model may evolve over time, the CAISO should make clear up front what this

evolution would look like. Second, it is equally important that EIM participant entities have an influential role in EIM oversight and decision-making.

6. Metrics

Opinions abound as to the value and/or accuracy of the previous EIM benefits studies. Stakeholders may now have the opportunity of either observing or participating in an operating EIM. Therefore, the CAISO, along with stakeholders, should develop transparent metrics to determine the actual benefit of EIM participation. Underlying these metrics should be a detailed modeling of participant transmission paths. To this end, with PacifiCorp in line as the first participant in an EIM, it would benefit other stakeholders to see a modeling of PacifiCorp's entire network of transmission in the northwest to truly see the effects of congestion and other constraints.

In addition, Reliability Metrics should be established and made public for participants to evaluate. Currently the CAISO reports regularly on Exceptional Dispatch and Transmission Limit Conforming activities. While the EIM Entities and Participants will be required to perform this important function within their areas of authority, the Market Operator should collect and report on these metrics to provide stakeholder visibility to model performance. As is done within the Southwest Power Pool (SPP) footprint and reported in the SPP Monthly State of the Market Report, aggregated and flow gate congestion by interval should be tracked. An additional metric for consideration would track the use of TRM's (Transmission Reliability Margins) or CBM's (Capacity Benefit Margins) by participants over time.

SMUD recognizes this is no a simple task, however, such development will assist in the future decision-making process with respect to other BAs evaluating their participation in an EIM.

7. Impacts on COI

SMUD reiterates the concerns raised by the Transmission Agency of Northern California (TANC) in its March 15, 2013 letter and in its comments in this stakeholder process that matters pertaining to potential impacts to the California-Oregon Intertie (COI) are fully considered and discussed with those parties potentially impacted, as required by the COI-related agreements among the CAISO, PacifiCorp, Pacific Gas and Electric Company, the Western Area Power Administration and TANC.¹ While SMUD takes no position or ventures to speculate as to what impacts this proposal might have, it does note that there is a process under the COI agreements to address this.

8. Greenhouse Gas (GHG) Emissions Impacts

SMUD has had a general concern that many of the EIM benefits potentially derive from increased dispatches of coal and other higher carbon resources. While the CAISO has addressed GHG issues to some extent, it admits that more discussion with the California Air Resources Board is required. SMUD believes this issue, which will have a direct impact on EIM pricing and resource tagging, and thus, EIM benefits, should be fully addressed prior to any final proposal being submitted.

¹ SMUD is a member of TANC, which manages SMUD's share of entitlements to the 500 kV California-Oregon Transmission Project.

9. Start-up Costs and Settlement

While it is helpful for the CAISO to provide cost estimates for participation in EIM, SMUD believes the CAISO underestimates the start-up costs necessary to participate in the proposed EIM.

In addition, SMUD believes it is too early in the development of EIM to know with certainty how much it is going to cost participants. The CAISO has identified an administrative rate of \$0.19 per MWh volume effective October-December 2014. This rate, however, is based on an EIM cost of \$96M divided by an allocated volume of 500 TWh. SMUD cannot see how this rate can work under the existing participation level, particularly if we assume limited transfer capability between the CAISO and PacifiCorp of 100 MW. This needs further explanation. At bottom, without detailed modeling of transmission paths, specific metrics analysis, actual participation volume, or assessment of GHG impacts, the true cost of participating cannot be accurately determined.