

**PUGET SOUND ENERGY COMMENTS**  
**DAY-AHEAD MARKET ENHANCEMENTS**  
**MAY 2, 2018**

Puget Sound Energy (PSE) appreciates the opportunity to provide the following comments on the California Independent System Operator's (CAISO) Day Ahead Market Enhancements Revised Straw Proposal. PSE supports CAISO's goals to improve grid reliability and the efficiency of the day-ahead market (DAM), and looks forward to CAISO addressing these comments in the next iteration of its proposal.

1. *PSE requests that CAISO provide additional clarification and explanation of certain aspects of the imbalance reserve product.*

PSE appreciates the analysis and information that CAISO has provided to date pertaining to historical imbalance and forecast accuracy, calculation of the imbalance reserve requirement, and settlement of the imbalance reserve product. To better analyze the imbalance reserve portion of the proposal, PSE requests that CAISO provide the following additional information in the next iteration of its proposal:

- Clarification of how the imbalance reserve product impacts/interacts with other elements of the real time market (e.g., the flexible ramping product, Energy Imbalance Market (EIM) resource sufficiency test, etc.)
- Explanation of what CAISO sees as the trade-offs between the different options on which CAISO has requested feedback, e.g., the imbalance reserve penalty price, the performance evaluation of imbalance reserve resources, and the additional design considerations in Section 3.6 of the proposal.

2. *PSE generally supports CAISO's proposed enhancements to the EIM that correspond to changing the EIM base schedule granularity from hourly to 15-minute.*

In Section 4 of its Revised Straw Proposal, CAISO proposes to change the EIM base schedule granularity from hourly to 15-minute, which will enable modifications to the resource sufficiency evaluation and over and under scheduling charges. These modifications include:

- Testing each BAA for resource sufficiency in each 15-minute interval, and when a BAA fails the flexible ramp sufficiency test, limiting the EIM transfer for the corresponding 15-minute intervals in the FMM and RTM.

- Modifying the determination of whether an EIM entity's load imbalance reaches the penalty thresholds from an hourly evaluation to a 15-minute evaluation, and reducing the minimum load imbalance level from 2MWh to 0.5 MWh.

CAISO also proposes to expand hourly resource plans to include a MW quantity for both regulation up and regulation down, and use this information to automatically calculate regulation energy classified as instructed imbalance energy.

PSE is generally supportive of these enhancements as proposed, and thanks CAISO for its responsiveness to requests from EIM entities to examine and modify these features of the EIM. However, PSE requests that CAISO clarify that the proposal to implement 15-minute base schedules in the EIM is that CAISO will still accept hourly base schedules, but with 15-minute granularity. PSE is concerned that a proposal that would require EIM entities to submit base schedules every 15 minutes would result in an undue administrative burden as it has the potential to significantly increase the amount of time that operators would need to commit to this activity.

3. *The extension of the DAM to the EIM footprint should be thoroughly vetted in a subsequent stakeholder process focused specifically on this topic.*

PSE's understanding of the current proposal is that it enhances the existing DAM, but does not encompass the changes that might be necessary to extend these enhancements to the EIM Entities in an extension of the DAM.<sup>1</sup> The proposal, however, references concepts that seem to be outside of this scope. For example, footnote 13 in the Revised Straw Proposal states that "imbalance reserves will be able to be met by resources in the EIM footprint not solely those located in a given balancing authority area." PSE would need additional time and information before it could fully analyze the feasibility of extending these concepts, and anticipates that the extension of these types of concepts in an expanded DAM will be thoroughly vetted in a subsequent stakeholder process to extend the DAM to the EIM footprint.

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<sup>1</sup> As a practical matter, PSE believes this means that entities outside of the CAISO BAA could only bid for an award of the proposed imbalance reserve product through the CAISO's existing intertie bidding process.