



Stakeholder Comments Template

Day-Ahead Market Enhancements Phase 1 Initiative

This template has been created for submission of stakeholder comments on the third revised straw proposal that was published on February 28, 2019. The proposal, Stakeholder meeting presentation, and other information related to this initiative may be found on the initiative webpage at:

<http://www.caiso.com/informed/Pages/StakeholderProcesses/Day-AheadMarketEnhancements.aspx>

Upon completion of this template, please submit it to initiativecomments@caiso.com. Submissions are requested by close of business on March 21, 2019.

Submitted by	Organization	Date Submitted
<i>Nate Moore</i>	<i>Puget Sound Energy</i>	<i>March 21, 2019</i>

Please provide your organization's comments on the following issues and questions.

1. Fifteen-Minute Granularity Design Features

PSE generally supports the fifteen-minute scheduling granularity features as proposed in the Third Revised Straw Proposal so long as CAISO provides the confirmation requested in section D. below.

A. Bid Submission Deadline

In Section 2.2 of the Straw Proposal, CAISO proposes to change the bid submission deadline from 10:00 am to 9:30 am to allow for additional time to process the increased number of bids that will result from moving to 15-minute bidding. PSE appreciates that CAISO has provided entities with an additional 30 minutes to submit bids as compared to the original proposal, however the current proposal has the potential to negatively impact PSE and other entities if the day-ahead market (DAM) is

expanded. As PSE noted in prior comments,¹ the proposed change is significant because it reduces the amount of time that market participants have to strategize, trade, and prepare bids, yet quadruples the number of bids that must be submitted.

Since CAISO proposes to change the unit commitment problem size from 15-minute granularity to hourly granularity,² PSE respectfully requests that CAISO reconsider its proposal to move up the bid submission deadline, and suggests that CAISO maintain the current 10:00 am market close time. A 10:00 am market close is also in line with the *earliest* deadlines used by other large regional markets across the country.

B. Benefit to Hydro Resources in the Pacific Northwest (PNW)

Throughout the stakeholder process, CAISO has consistently noted that 15-minute scheduling granularity in the DAM will better pre-position the schedules of PNW hydro resources so that they will have more flexibility available for the real-time market (RTM), and that such flexibility is not achievable with hourly granularity in the DAM today.³ PSE respectfully notes that not all hydro resources in the PNW face this limitation. As such, it would be more accurate for CAISO to point to a specific sub-region that has this limitation rather than suggest that all PNW hydro resources are not flexible in real-time today.

C. Unit Commitment (UC) Decisions

During the stakeholder call on March 7, CAISO communicated that the technical solution for 15-minute UC is not achievable and reliable due to the technical limitations of today's Mixed-Integer Programming (MIP) algorithm. As a result, CAISO proposes to solve the UC problem using hourly granularity, and the economic dispatch problem in 15-minute granularity.

PSE believes that solving the hourly UC problem may compromise market efficiency. For example, a resource that should be turned on for the last quarter of

¹ <http://www.caiso.com/Documents/PSEComments-Day-AheadMarketEnhancements15-MinuteGranularity-SecondRevisedStrawProposal.pdf>

² Section 2.3 of the Straw Proposal.

³ E.g. Section 2.1 of the Straw Proposal.

the hour but needs to be turned on for the entire hour may result in two undesirable outcomes. First, the locational marginal price (LMP) may be depressed in the first three quarters of the hour. Second, the resource may not recover its cost, leading to out-of-market-payments. Recognizing the technical challenges discussed above, PSE suggests that CAISO continue to look for technology advances that would make it possible to solve UC decisions in 15-minute granularity in the future.

D. Ancillary Services (AS)

In Section 2.8 of the Straw Proposal, CAISO proposes to require resources that receive spin/non-spin awards to sustain their output for 30 minutes even though the resources may only receive an award for a 15-minute interval. During discussions at the March 7, 2019 stakeholder meeting CAISO mentioned this 30-minute requirement was for a unit to continue to hold headroom rather than simply being capable of operating at the awarded level. A requirement to continue to hold headroom would not be appropriate. PSE requests that CAISO confirm that this section is not intended to require units awarded spin/non-spin to continue to hold headroom past the period in which they received an AS award.

2. Fifteen-Minute Granularity Impacts to the Energy Imbalance Market

PSE generally supports Section 3 of the Third Revised Straw Proposal, which addresses fifteen-minute granularity impacts to the Energy Imbalance Market.

3. Energy Imbalance Market Governing Body Role

PSE generally supports the EIM Governing Body role for this proposal as set forth in Section 4 of the Third Revised Straw Proposal.