



## Department of Energy

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Bonneville Power Administration  
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### **CAISO DAM Enhancements Phase 1: Fifteen-Minute Granularity Second Revised Straw Proposal, August 27, 2018 Bonneville Power Administration Comments**

Submitted by	Company	Date Submitted
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Bonneville Power Administration (Bonneville) appreciates the opportunity to comment on the second revised straw proposal for the Day-Ahead Market Enhancements Phase 1: Fifteen-Minute Granularity stakeholder initiative.

Bonneville is a federal power marketing administration within the U.S. Department of Energy that markets electric power from 31 federal hydroelectric projects and some non-federal projects in the Pacific Northwest with a nameplate capacity of 22,500 MW. Bonneville currently supplies 30 percent of the power consumed in the Northwest. Bonneville also operates 15,000 miles of high voltage transmission that interconnects most of the other transmission systems in the Northwest with Canada and California. Bonneville is obligated by statute to serve Northwest municipalities, public utility districts, cooperatives and then other regional entities prior to selling power out of the region.

Bonneville respectfully submits the following comments and requests for clarification:

#### **Ramping Requirements**

Bonneville requests more clarity on the expected ramping conventions for resources participating in the real-time market. The proposal clearly outlines the ramping conventions and settlement for resources that are *not participating* in the real-time market. In contrast, the proposal outlines the proposed changes to settlement of standard ramping energy for resources *participating* in the real-time market, but does not explicitly discuss any changes – nor does it appear to preclude changes – to ramping conventions for such resources.

## **Ancillary Services**

CAISO proposes to procure ancillary services in 15-minute granularity in both the day-ahead and real-time markets. The CAISO also proposes to shift settlement, obligation and cost allocation to 15-minute granularity. Bonneville is concerned that the potential misalignment of obligations of ancillary services (under the current tariff) and compensation for ancillary services under the proposal may either 1) detrimentally affect participation in the day-ahead ancillary services market; or 2) unnecessarily increase the procurement cost of ancillary services in the day-ahead market. Under the proposal, the CAISO can *procure and settle* regulation for only one 15-minute interval while the Tariff (Appendix K, Part A) requires the seller's resource to be *available* for 30 minutes (real-time market) or 60 minutes (day-ahead market). Bonneville requests further detail regarding how the CAISO intends to amend its Tariff to achieve alignment of obligations and compensation associated with ancillary services under the new 15-minute granularity paradigm of the day-ahead market.

Further, Bonneville encourages the CAISO to retain the ability to procure ancillary services on an hourly basis and to ensure the deliverability of the ancillary services that are procured. The CAISO proposes to limit procurement of ancillary services from intertie resources to those intertie resources which can be scheduled into the 15-minute market. Bonneville is concerned that this aspect of the proposal may result in a decline of market participation or unnecessarily increase the procurement cost of ancillary services from intertie resources as market participants will seek to recover the cost of hourly transmission.

## **Resource Sufficiency**

Bonneville generally supports the CAISO's proposal to modify the resource sufficiency evaluation to a fifteen-minute granularity to align with a fifteen-minute day-ahead market; however, Bonneville has certain concerns with the changes and, at a minimum, requests that the CAISO provide additional information about the proposed modifications to the resource sufficiency tests.

Bonneville supports the CAISO's proposed modification to the consequence of failing the flexible ramp sufficiency (FRS) test, which would limit EIM transfers to each failed fifteen-minute interval rather than to the entire operating hour, as well as supports the CAISO's application of a 1% tolerance threshold to the FRS test. Bonneville encourages the CAISO to implement these changes as soon as possible.

Bonneville also supports the CAISO's proposed modification of the over and under scheduling charges from an hourly evaluation to a fifteen-minute evaluation. However, Bonneville is concerned that the modification, as proposed, will increase an EIM entity's risk of over and under scheduling charges when that EIM entity uses its own load forecast or does not schedule within 1% of the CAISO load forecast. Under the proposed fifteen-minute evaluation, over or under scheduling during one fifteen-minute interval can no longer be offset by under or over scheduling that occurs during other fifteen minute intervals in the same hour, thus increasing the likelihood of an over or under scheduling charge during the hour. Bonneville recommends that

the CAISO consider adopting a minimum load imbalance level greater than 0.5 MWh (perhaps 1 MWh), to help mitigate the greater risk EIM entities would be exposed to under the more stringent fifteen-minute evaluation of over and under scheduling.

Bonneville continues to encourage the CAISO to develop a standalone business practice manual (BPM) or a distinct document that explains in as much detail as possible the mechanics and particulars of the resource sufficiency tests, noting these and any other future proposed modifications to the tests. Given the complexity and importance of these tests, Bonneville believes that a detailed document is needed such that EIM participants can replicate the tests to make well informed market and operational decisions. To ensure that the CAISO's proposed changes to the resource sufficiency tests are well understood by all stakeholders and EIM participants, Bonneville specifically requests that the CAISO describe in more detail the following information:

- Will the hourly resource plan specify fifteen-minute, rather than hourly, base schedules, energy bids, upward and downward available balancing capacity, and reserves (i.e., 4 times the data submitted today for every hour)?
- Will the FRS test continue to calculate the ramp requirement for a 15-min interval of the next hour relative to the last fifteen-minute interval of the current hour as done today? Or will the FRS test calculate the ramp requirement for a 15-min interval of the next hour relative to the previous 15-min interval of the next hour? For example, will the ramp requirement for the third fifteen-minute interval of the next hour (T+37.5) be calculated relative to the second fifteen-minute interval of the next hour (T+22.5) or relative to the last fifteen-minute interval of the current hour (T-7.5)?
- Will the flexible ramp up and down uncertainty requirements for a given fifteen-minute interval be calculated as they are today? If not, how will the calculation change? For example, will histograms used to calculate the uncertainty requirement be constructed for each fifteen-minute interval or as currently done for the hour? Will the same up and down uncertainty requirement apply to each fifteen-minute interval within an hour or will each fifteen-minute interval have its own uncertainty requirement?
- If an EIM entity fails the FRS test for a given fifteen-minute interval in the next hour, will the EIM transfer be limited to the FMM transfer from the last fifteen minute interval of the current hour or limited to the FMM transfer from the previous 15-min interval of the next hour? For example, if an EIM entity fails the FRS test for the third fifteen-minute interval of the next hour (T+37.5), will the EIM transfer be limited to the FMM transfer from the second fifteen-minute interval of the next hour (T+22.5) or to the FMM transfer from the last fifteen-minute interval of the current hour (T-7.5)?
- Will the diversity benefit be calculated every hour or every fifteen minutes?
- Will the fifteen-minute version of the Capacity Test apply to all EIM entities or only to those EIM entities that choose to use the 15-minute CAISO load forecast?
- Does the CAISO expect to make any modifications to the Feasibility Test?

The CAISO stated it plans to propose changes to the BPM to capture the modifications to the FRS test; however, it is unclear to Bonneville whether the CAISO will also capture all other proposed changes in the BPM. Bonneville encourages the CAISO to propose changes to the BPM to capture all potential modifications to the resource sufficiency tests.

Finally, Bonneville cannot make a determination in support of or otherwise regarding the CAISO's proposal to automatically calculate the regulation energy without additional details from the CAISO. Bonneville requests that CAISO explain how they propose to use the regulation up and down MW quantities included in the hourly resource plan to automatically calculate the regulation energy. Also, will EIM entities continue to provide upward and downward available balancing capacity quantities in their hourly resource plan as done today? If not, what changes might be made to this requirement?