

Western Power Trading Forum Comments on Day-ahead Market Enhancements Issue Paper and Straw Proposal

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About the Western Power Trading Forum

The Western Power Trading Forum (WPTF) is a California nonprofit, public benefit corporation. It is a broad-based membership organization dedicated to enhancing competition in Western electric markets while maintaining the current high level of system reliability. WPTF supports uniform rules and transparency in order to facilitate transactions among market participants. The membership of WPTF and the WPTF CAISO Committee responsible for providing these comments includes CAISO and EIM entities, load serving entities, energy service providers, scheduling coordinators, generators, power marketers, financial institutions, and public utilities that are active participants in the California market, other regions in the West and across the country.

Comment Summary

WPTF appreciates the opportunity to provide comments on the Day-ahead Enhancements Issue Paper and Straw Proposal. WPTF supports the initiative scope to (1) move to a fifteen-minute day-ahead market, (2) combine IFM and RUC, and (3) create a day-ahead imbalance reserve product. In aggregate, these changes should increase market efficiency by better matching day-ahead market commitments with real-time demand and by explicitly pricing needed flexibility from resources.

WPTF acknowledges that the proposal is a fundamental change in price formation, and thus will impact revenue outcomes, perhaps significantly, for different market participant segments. WPTF is not aware of any precedent for the design set by another ISO that may give an indication of how significant the price impacts may be.¹ The proposal is also closely intertwined to other initiatives, such as EIM expansion and FRAC MOO 2. In short, this stakeholder initiative will be complex and interactive with other active stakeholder initiatives. As such, development and vetting of the proposal, and its implementation, will require an unparalleled level of openness and collaboration across a broad spectrum of market participants including both CAISO stakeholders and the broader Western stakeholder community.

Detailed comments and questions on the issue paper and straw proposal are provided below.

Detailed Comments

These comments are broken into three sections, (1) 15-minute market, (2) IFM and RUC, and (3) DA imbalance product. WPTF will hold off on commenting on price formation details until the revised straw proposal is posted with the technical details. The formulas along with requirement expectations will be invaluable in assessing the likely success and outcome of the DA Enhancements initiative.

¹ If there is another ISO with a similar design, WPTF asks that the CAISO provide additional information to stakeholders on the precedent.

(1) Fifteen-Minute Day-Ahead (DA) Market

Support for proposal scope

The CAISO proposes to move from an hourly to a fifteen-minute DA market, with hourly bids and 15-minute schedule settlement. The impetus for the change is to align the DA market with the 15-minute real-time (RT) market. The CAISO asserts that aligning the market granularities will allow shaped imports and self-schedules to better address real-time ramping needs and that the optimization will be better able to commit resources needed for 15-minute ramping. The purpose is to reduce the amount of imbalance the RT market must resolve. Currently, the CAISO finds itself in real-time with significant amounts of imbalance requirement (over 1,000+ MW on average) that needs to be resolved to maintain reliability. This imbalance amount is only likely to increase as additional renewable resources enter the grid. WPTF agrees that aligning market granularity between DA and RT will reduce RT imbalance by the amount that is due purely to the differences attributed to ramping between average hourly forecasts and ramping between average 15-minute forecasts. WPTF performed a quick review of Oasis data for December 2017 and found that this amount is not negligible and granularity differences can cause upwards of 2,000 MW of additional ramping capability needed in real-time.

Support for specific design details

- The CAISO proposes to still allow hourly block bidding by load, and internal and inertie resources. At this time, WPTF does not see an issue with allowing these block hourly bids *as long as* they are accounted for in the DA imbalance product and assigned their portion of the imbalance costs. This is discussed in section 3 below as well.
- The CAISO proposal would continue to require hourly bids that would be dispatched in 15 minute increments. The basis for this proposal is the CAISO's assertion that validation of 96 bids versus 24 bids is a significant enough systems hurdle to dismiss the idea without consideration. WPTF is not persuaded that increased validations or that the CAISO's assertion that costs do not change every 15-minutes so that market participants should not want 15-minute bidding are compelling. Therefore, WPTF urges the CAISO to perform more rigorous evaluation of the 15 minute *bidding* granularity that matches the 15 minute dispatching proposal.
- WPTF asks that the CAISO provide at least a month's worth of historical 15-minute forecast data in an excel file for stakeholders to evaluate or that it be added to Oasis. The benefits of moving to a DA 15- minute market are predicated on the idea that the 15-minute interval to 15-minute interval uncertainty will be significantly better than the hourly interval to 15-minute uncertainty. This presumption can and should be validated in advance of the design finalization.

(2) IFM and RUC

Support for proposal scope

The CAISO proposes to integrate IFM and RUC. It is WPTF's understanding that this means the optimization will commit resources such that two constraints are met, the financial day-ahead forecast (bid-in demand, including virtuals) and the reliability forecast (CAISO forecast of

CAISO demand plus renewable and other operator adjustments).² All day-ahead commitments for long-start resources will be binding as is the current practice, but medium, short, and fast-start resources will only be issued an advisory commitment. (These resources would only receive binding commitments if needed in the real-time.) Overall, the impact of this change should be to prevent over-commitment or inefficient commitment of resources in IFM that today are fixed and cannot be decommitted or changed in RUC regardless of the actual real-time forecast need. As such, WPTF supports this element of the proposal as it should more efficiently commit resources and ultimately better align day-ahead and real-time prices. WPTF is less clear on how these changes will impact energy price formation, but understands the CAISO will present these details in the next draft, and WPTF will provide additional comments at that time.

WPTF supports making a concurrent change to the real-time market to increase the STUC horizon to 8-hours. This change would allow commitment decisions made in the combined IFM/RUC to be better correlated with the in real-time optimization.

(3) DA Imbalance Product

Support for proposal scope

The CAISO proposes a biddable DA imbalance product. The product will address upward and downward uncertainty due to forecast changes of load and resources between DA and RT. As noted above and during the March 7 meeting, WPTF supports the CAISO expanding this product to address not only the uncertainty due to forecast changes of load and resource, but to also include any latent granularity differences between the DA and RT market due to block hourly bidding. This change would improve the product's potential to meaningfully price flexible capability and send a signal to the market on what attributes and resources are needed for reliability.

Theoretically the imbalance should work together with the FRAC MOO 2 initiative to provide a clear path for flexible RA procurement or retirement. WPTF strongly supports this product being biddable by all resources (both RA and non-RA) and asks that the CAISO clearly describe up front the purpose of the flexible RA program and purpose of this product so that all potential double-counting issues can be addressed early and often.

WPTF thanks the CAISO for the consideration of these comments, and looks forward to participating in this important stakeholder process.

² WPTF encourages the CAISO to more clearly describe how IFM and RUC will be combined. For example, slide 8 calls the reliability forecast "Demand – VER forecast" when it is WPTF's understanding the CAISO actually means Demand – Δ VER forecast, i.e. CFCD minus the difference between bid-in VERs and the CAISO VER forecast.