Stakeholder Comments Template

Day-Ahead Market Enhancements Phase 1 Initiative

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<tr>
<th>Submitted by</th>
<th>Organization</th>
<th>Date Submitted</th>
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<tbody>
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<td>March 26, 2019</td>
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Please provide your organization’s overall position on the DAME straw proposal:

- [x] Support
- [ ] Support w/ caveats
- [ ] Oppose
- [ ] Oppose w/ caveats
- [ ] No position

Please provide written comments on each of the straw proposal topics listed below:

The Public Power Council (PPC) appreciates the opportunity to provide comments on the Day-Ahead Market Enhancement Straw Proposal from February 7, 2019. PPC strongly supports the proposal and believes the Day-Ahead Market Enhancements are critical to efficiently maintain reliability, form prices that accurately reflect the operational needs of the grid, and successfully extend the day-ahead market to EIM participants.

1. New day-ahead market products, including reliability energy, reliability capacity, and imbalance reserves.

PPC strongly supports the proposed reliability energy, reliability capacity and imbalance reserve products. As renewable penetration in the CAISO BAA has grown, the increased demand for flexibility and ramping capacity has created operational challenges. In recent years, to maintain grid reliability, CAISO has increasingly relied on various types of operator initiated out-of-market actions. Since 2017, CAISO data and reports show that operator-initiated actions such as load conformance, RUC adjustments, and exceptional dispatch have grown in frequency and magnitude. The Q4 2019 Report on Market Issues and Performance reported that over the last year, load adjustments in the evening peak were on average greater than 1000 MWs. The same document shows operator adjustments are a
significant determinant of RUC procurement. These actions are especially prevalent in the summer months when the CAISO grid is the tightest.

The regular reliance on what should be uncommon out-of-market actions suggests the CAISO day-ahead market does not have the necessary mechanisms or products to meet the operational needs of the grid. The out-of-market actions indicate the potential for reliability risk and distort market price signals. The operational challenges faced by CAISO and other western BAAs will continue to increase as baseload resources retire and renewable integration grows. Continuing to rely heavily on out-of-market actions is inefficient and unsustainable.

The combination of the new imbalance reserve products and the reliability energy constraint will enable the day-ahead market to procure sufficient flexible and physical capacity to meet uncertainty needs and load that may materialize in real-time. PPC strongly supports the procurement of energy, imbalance reserves and reliability capacity in a single co-optimized day-ahead market solution. The proposed design, which ensures sufficient physical capacity is committed day-ahead, is a necessary improvement over the status quo “financial” market where financial participants affect unit commitment and capacity short-falls are procured sequentially in the RUC. The proposal is more efficient than the existing sequential IFM-RUC process because the market optimization will be able to allocate capacity, energy and flexibility needs across the full generation fleet at once, instead of sequentially. This co-optimization should lead to a more efficient and least-cost market solution that fairly compensates resource for the services they provide.

PPC believes the day-ahead market enhancements are critical for the success of the Extended Day-Ahead Market. First, the proposed changes will be essential for encouraging the expansion of the day-ahead market to EIM participants. For instance, customers in BPA’s Balancing Authority Area currently receive a very high level of service and PPC would look to ensure that the day-ahead market design facilitates a similar or higher level of service before supporting BPA joining a potential EDAM. Second, these proposed changes would allow the larger Day-Ahead footprint to capture the full benefits of an extended day-ahead market. Entities outside of the CAISO may be more willing to decommit units when they have confidence the energy they purchase is backed by physical capacity. If the market is not procuring sufficient firm capacity, entities may hold back capacity from the market to maintain their own BAAs reliability. This holding back of capacity will limit the potential benefits the EDAM can provide.

PPC understands that these changes represent a significant change from the status quo but continues to believe that these changes will produce the greatest benefits for all market participants. PPC encourages CAISO to continue to work on studying and quantifying the benefits of the new day-ahead market enhancement proposal. This analysis should reflect the risks associated with the status quo and potential lost benefits associated with reduced participation outside of the CAISO BAA.
2. **Settlement and cost allocations.**

Under the proposal, the day-ahead market will produce two day-ahead schedules and prices. Physical and virtual resources will both receive a day-ahead energy schedule and associated LMP. Physical resources will receive an additional reliability energy schedule and associate REN LMP. PPC supports this change because it will ensure all physical resources will be compensated for the capacity contribution they provide. Additionally, PPC believes the REN LMP will provide additional price discovery information over the status quo. The additional settlement paid to physical resources will provide additional information to market participants about the tradeoffs between energy and capacity at the nodal level. This could produce valuable information on locational system needs similar to the congestion component of LMPs. PPC understands that the capacity constraint and the resulting REN LMP may require the renegotiation of RA contracts, however the change would allow resources to price capacity more accurately than RA contracts that are negotiated well ahead of delivery periods.

3. **Bidding rules and offer obligations.**

As explained in the Straw Proposal, ideally when awarding imbalance awards and reliability capacity CAISO would jointly consider capacity and energy costs. This is an existing shortfall of the RUC process where awarded capacity with a must-offer obligation bids into the real-time market near the price cap. PPC agrees that given the frequency with which these reserves may be called on, joint consideration of energy and capacity costs are necessary to ensure efficient outcomes. PPC is interested in CAISO’s potential proposals for mechanisms to address this issue.

4. **Scheduling rules for variable energy resources.**

No comment at this time.

5. **Deliverability approach for reliability capacity and imbalance reserves.**

PPC is supportive of the expansion of the proposal to include deliverability of reserves at the nodal level. If deliverability at the nodal level is technically infeasible, PPC supports zonal deliverability.

6. **Approach for congestion revenue rights.**

No comment at this time.
7. **Approach for local market power mitigation.**

PPC seeks additional clarity on how default capacity bids will be set for different resources. Similar to perspectives shared in CAISO’s Local Market Power Mitigation initiative, PPC believes the default capacity bids for hydro generation need to reflect the complex nature of hydro systems and opportunity cost of each resource’s capacity.

8. **Regression approach to determine the imbalance reserve requirement.**

PPC is supportive of determining the imbalance reserve requirement based on a regression model approach. This methodology could lead to an imbalance reserve requirement that more accurately reflects system needs during the day-ahead time frame. PPC understands the need for adjustment ratios and looks forward to seeing other potential methodologies for estimating the percentiles of the sum of the uncertainty variables.

9. **Additional comments:**

PPC appreciates the opportunity to comment on CAISO’s Day-Ahead Market Straw Proposal and looks forward to continuing to work with CAISO staff and other stakeholders as this proposal is refined. PPC continues to strongly support CAISO’s proposal. This proposal addresses the objectives set forth by the CAISO and makes improvement that will be necessary for a successful EDAM.