



Stakeholder Comments Template

Day-Ahead Market Enhancements (DAME) Initiative

This template has been created for submission of stakeholder comments on the revised straw proposal that was published on June 8, 2020. Materials related to this initiative can be found on the ISO website at: <http://www.caiso.com/StakeholderProcesses/Day-ahead-market-enhancements>.

Upon completion of this template, please submit it to initiativecomments@caiso.com. Submissions are requested by close of business on July 6, 2020.

Submitted by	Organization	Date Submitted
Andrew Meditz (916) 732-6124 Martha Helak (916) 732-5071 Bill Her (916) 732-6395	Sacramento Municipal Utility District (SMUD)	July 13, 2020

The Sacramento Municipal Utility District (SMUD) provides the following comments on the CAISO's Day-Ahead Market Enhancements (DAME) Revised Straw Proposal, dated June 8, 2020 (Revised Straw Proposal), and the subsequent stakeholder meetings. SMUD currently participates in the Energy Imbalance Market (EIM) through the Balancing Authority of Northern California, and is exploring the feasibility of the Extended Day-Ahead Market (EDAM) initiative. In addition, SMUD is an active participant in the CAISO's day-ahead and real-time markets over the interties. Accordingly, SMUD has a direct interest in this initiative from both a market and reliability perspective.

At this time, SMUD provides limited comments and we reserve the right to supplement our comments in the future.

SMUD appreciates the CAISO pursuing the DAME initiative as improvements are needed for both market efficiency and reliability. This is a complex issue and will benefit from the one-year implementation extension, now scheduled for Fall 2022. We encourage the CAISO to use this additional time to fully develop concepts, engage further with stakeholders, and provide a thorough set of proposals.

The Revised Straw Proposal is an improvement over the last proposal, mainly because it removes Reliability Energy (REN) and the two location marginal price (LMP) structure, which created pricing uncertainty. However, the Revised Straw Proposal includes some significant changes and we encourage the CAISO to provide more details and rationale behind the concepts in the Revised Straw Proposal.

SMUD notes that the CAISO's goal is to coordinate DAME with EDAM and RA Enhancements to ensure alignment and consistency. While this coordination makes sense and is important, it needs to be recognized that EDAM is still in the conceptual phase. Additionally, there are different opinions from camps of stakeholders on how to proceed with DAME, given the linkage between the DAME and EDAM initiatives. We support the CAISO moving forward with the DAME improvements with a recognition that some issues may need to be revisited as the EDAM design is finalized as part of its stakeholder process.

Please provide your organization's overall position on the DAME revised straw proposal:

- Support
- Support w/ caveats
- Oppose
- Oppose w/ caveats
- No position

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

1. Updated market formulation:

SMUD appreciates the removal of REN and the decoupling of capacity products in the Revised Straw Proposal. This reduces the impact of operator forecast, which is naturally biased towards over-procurement, from inflating costs to the grid. SMUD supports approaches that lead to lower cost solutions for customers. However, SMUD also respects the importance of reliability. SMUD applauds the CAISO's balanced approach towards creating an effective market that is fair to both supply and demand. SMUD believes the latest proposal is a step in the right direction and is an improvement over the prior proposal. Yet, it can be enhanced by a few suggestions:

- *Instill confidence that the DAME approach maintains reliability.*
 - *Some of this can be accomplished by ensuring that there is enough physical capacity to back virtual supply that clears the market before allowing it to do so. For example, in the scenario provided by CAISO on the June 17 slides, <http://www.caiso.com/InitiativeDocuments/Presentation-Day-AheadMarketEnhancements-MarketFormulation.pdf>, it is not clear whether the virtual supply would be allowed to clear and set the market instead of G2 if there were insufficient RCU bids to support awarding virtual supply instead of G2. It is also not clearly stated how*

virtual supply would be allocated the uplift costs of energy provided by G3's RCU. Since virtual displaced G2 and caused the excess RCU procurement in the final pass of the example, it makes sense that virtual is responsible for the extra costs incurred. This linkage is necessary to discourage suppliers from capturing compensation for both RCU and virtual supply while holding back physical resources. Effectively implementing this mechanism is essential to maintaining reliability and deterring market manipulation.

- *The CAISO could also elaborate on the penalties of non-performing RC and IR bids.*

- *Demonstrate that the market solution is fair and open to competitive bidding and represents the best attempt at the lowest production cost scenario.*
 - *For example, in the scenario provided by the CAISO above, the solution in the final pass represents the lowest cost approach but only if the energy from G3's RCU ends up not being dispatched. While SMUD recognizes the day-ahead (DA) market represents the plan and not necessarily the dispatch in RT, generators' commitment and operation plans are affected. Specifically, in the example, if G2 is not awarded in the DA market it may not show up in real-time (RT). If the load materializes at 125 MW or greater and G2 is no longer available in RT, then the market is now using G3's higher energy costs to meet demand. SMUD respects that this still represents a market determined solution for DA planning. SMUD also respects the challenges associated with not knowing the RT results ahead of time to determine whether one leads to a more optimal dispatch than the other. The potentially suboptimal solution could be easier to accept if the CAISO would confirm how these higher costs are allocated. These costs born from the suboptimal solution should be worn by the appropriate source of causation.*
 - *The CAISO should explore incorporating structures in the DA market passes to probabilistically determine which market result (among the different passes) leads to the most likely optimal dispatch in RT without sacrificing reliability. Using this approach instead of defaulting to one method over the other gives the market flexibility to mitigate outcomes where lower cost DA results predictably lead to higher RT dispatch results. Using an extreme example to illustrate, if the market cleared where the CAISO's forecast is 20,000 MW and virtual supply made up 10,000 MW in addition to 10,000 MW of RCU, the CAISO would know that most of that 10,000 MW of RCU is likely to get dispatched. If the underlying energy cost associated with that RCU is significantly higher than the physical energy that virtual supply replaced, the CAISO would recognize that the DA market result is likely to lead to a suboptimal dispatch.*

2. Accounting for energy offer cost in upward capacity procurement:

SMUD agrees with the concept of offer caps to deter capacity bids that have the intent of offering energy at high prices that are unlikely to get dispatched. SMUD recommends the CAISO strengthen this approach further by having mechanisms to relax the constraint for scarcity and resource constrained events. It is important for the CAISO to maintain flexibility to account for scenarios not incorporated into any historical-based assumptions for price caps.

3. Variable energy resources:

To align with the State of California's goal of promoting renewable resources, SMUD encourages the CAISO to explore methods to minimize the general devaluation of variable energy resources (VER) resources. For example, in the Revised Straw Proposal, VER resources can only participate in the downward direction. Since VER resources' ability to participate is dependent on the forecast, SMUD asks the CAISO to consider whether to allow the resource to self-schedule at a point lower than the forecast and bid in RCU or IRU up to the forecast amount. If the CAISO is already procuring upward capacity to account for VERS, it seems this would allow the resource to make a decision between offsetting its upward capacity costs by "self-providing" or taking the energy price and paying the upward capacity costs.

4. Market power mitigation for reliability capacity and imbalance reserves:

5. Please include additional comments including considerations for other possible solutions or concerns to any of the above topics: