California ISO

Stakeholder Comments Template

Day-Ahead Market Enhancements (DAME) Initiative

Submitted by	Organization	Date Submitted
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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:

PGP supports development and co-optimization of new capacity products

PGP supports the objectives of the Day-Ahead Market Enhancements and appreciates all of CAISO's efforts over the course of the Day-Ahead Market Enhancements initiative to develop a solution that meets those objectives and balances the varying interests of different stakeholders.

Specifically, PGP strongly supports development of the reliability capacity up/down product to replace the existing residual unit commitment awards and the development of imbalance reserves to ensure the day-ahead market schedules sufficient real-time dispatch capability to meet net load imbalance that materialize between the day-ahead

[1] PGP represents eleven consumer-owned utilities in Washington and Oregon that own almost 8,000 MW of generation, approximately 7,000 MW of which is hydro and over 97% of which is carbon free. Four of the PGP members operate their own balancing authority areas (BAAs), while the remaining members have service territories within the Bonneville Power Administration's (BPA) BAA. As a group, PGP members also purchase over 45 percent of BPA's preference power.

and fifteen-minute markets. Additionally, PGP strongly supports co-optimization of these new products with energy and ancillary services to schedule resources more efficiently and to include consideration of transmission constraints when awarding these new products that the market provides.

Yet while PGP believes the changes made to the market formulation in CAISO's updated formulation[2] presented at the stakeholder meeting on June 17, 2020 do provide a reliable solution, the outcome of the multiple iterations (or passes) is a less efficient dispatch and price solution (than what was proposed in CAISO's Straw Proposal dated February 7, 2020). As such, PGP encourages CAISO to consider alternatives that more effectively achieve CAISO's stated objectives for this initiative – *"to develop a day-ahead market design that efficiently determines and prices day-ahead market energy schedules based on economic bids, while also efficiently scheduling sufficient physical capacity to provide dispatch capability."*

Physical energy reduces the need for reliability capacity and should receive compensation for the capacity it provides

PGP supported the pricing results of the previous proposal. The proposed optimization in the previous straw proposal dynamically determined the amount of reliability energy to procure by considering the system operators' net load forecast as well as the quantity of physical energy versus virtual energy cleared. The reason for this is that any physical energy that clears reduces the need for reliability capacity while any virtual energy that clears increases the need for reliability capacity. In other words, physical energy provides both energy and reliability capacity and therefore does not require the market solution to procure additional reliability capacity.

PGP understands that the other perspective regarding the issue of physical energy receiving both the energy and reliability capacity price is that California load-serving entities have already procured capacity on a forward basis to meet the needs of the CAISO Balancing Authority Area. According to this perspective, it is therefore not appropriate for California load-serving entities to double-pay for capacity. PGP agrees that this concern should be addressed, and requests CAISO consider alternative solutions to addressing these concerns while still providing fair compensation to non-Resource Adequacy *physical energy* resources for the reliability capacity they provide.

Efficient market dispatch considers the costs and tradeoffs between the different market products

PGP also supported the dispatch solution that resulted from the previously proposed market formulation. The previous market formulation resulted in optimal tradeoffs between products, acknowledging that awarding virtual energy requires additional procurement of reliability capacity and recognizing those costs as part of the tradeoff. In

[2] See slide 5 of CAISO's Updated Market Formulation

other words, between the choice to serve the next increment of demand between (a) $24 virtual supply that required an additional $2 reliability capacity up or (b) $25 physical supply, an optimal market solution would choose the $25 physical supply. It is more cost effective (efficient) to serve the next increment of load, in that example, with $25 physical energy than it is to serve the next increment of load with a $24 virtual energy + $2 reliability capacity ($26 total). The Straw Proposal market formulation would have selected Option 1, while the current Revised Straw Proposal proposal would select Option 2. Hence the previous proposal resulted in a more efficient dispatch.

The market formulation in the revised proposal adds two additional market passes (iterations) and no longer acknowledges the additional costs incurred by virtual supply when determining which is the least cost resource (or supply) to serve the next increment of load. PGP requests CAISO consider ways in which the dispatch optimization of the first market pass that includes the REN constraint can be maintained while still addressing the pricing concerns.

PGP agrees stakeholder concerns should be addressed

PGP acknowledges the difficulty CAISO faces in developing a solution that satisfies the broad range of concerns raised given the diverse interests expressed through the stakeholder process. PGP appreciates CAISO's transparency as to why it is moving forward with an alternate proposal, even though it adds complexity and results in less efficient market outcomes. CAISO noted stakeholder concerns that the previous proposal abandoned the purpose of the day-ahead market as a financial interaction between supply and bid-in load, potentially prevented load-serving entities from achieving their desired day-ahead market position, and the compensation provided for capacity to physical resources that were procured under Resource Adequacy contracts conflicted with the compensation already incorporated into those Resource Adequacy contracts. PGP believes these are important concerns that do merit addressing. And PGP requests that CAISO find a way to address these specific concerns while still achieving a solution that results in efficient dispatch and appropriate pricing for physical energy awards.

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

PGP supports measures that consider the underlying energy prices of resources awarded reliability capacity and/or imbalance reserves. Ideally the market would distinguish the energy cost of resources when awarding existing reserve products rather than place an arbitrary real-time energy offer cap that could lead to distorted marginal pricing. On the stakeholder calls, CAISO stated it ran into limitations when considering the ability to consider the energy costs associated with reliability capacity up and down. PGP looks forward to hearing more on how CAISO will forecast the P97.5 net load price and whether it is feasible to calculate and provide that value to market participants in time for market participants to be able to make adjustments to their capacity bids.

3. **Variable energy resources:**
   No comments.

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

   PGP requests that rather than set a hard capacity offer cap of $247, CAISO consider shortage and scarcity pricing for reliability capacity and imbalance reserves, possibly using a graduated demand curve.

   CAISO stated that the $30 default capacity bid price was derived from analyzing the 90th percentile historical spinning reserve price, which is assumed a competitive capacity price that reflects the cost of being available in the real-time market. However, PGP believes spinning reserves is not a good marker for setting default capacity bids for the reliability capacity and imbalance reserves products. Spinning reserves is a relatively illiquid, low volume product as much of the spinning reserves is self-supplied. PGP requests other options be considered for mitigation of capacity bids.

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