

Stakeholder Comments Template

Flexible Ramping Product Refinements Issue Paper/Straw Proposal

This template has been created for submission of stakeholder comments on the **Flexible Ramping Product (FRP) Refinements issue paper/straw proposal** that was posted on November 14, 2019. Information related to this initiative may be found on the initiative webpage at: <http://www.caiso.com/StakeholderProcesses/Flexible-ramping-product-refinements>.

Upon completion of this template, please submit it to initiativecomments@caiso.com by close of business on December 5, 2019.

Submitted by	Organization	Date Submitted
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Please provide your organization’s comments on the following topics as discussed in the paper/proposal, including your positions on the proposed solutions (i.e., support, support with caveats, oppose, oppose with caveats). When applicable, please provide detailed examples to explain your organization’s positions.

The Public Generating Pool (PGP)¹ thanks CAISO for providing stakeholders the opportunity to comment on its November 14, 2019 Flexible Ramping Product Refinements issue paper/straw proposal. CAISO’s price performance analysis report identified enhancing the flexible ramping product (FRP) as one of the most important steps to improve price performance in CAISO’s markets. PGP believes sound price formation and performance are critical to the health of CAISO’s markets and its ability to expand future market offerings. PGP therefore supports CAISO’s efforts to improve the FRP and offers the following comments which are focused on deliverability enhancements and how to sequence the development of real-time FRP deliverability solutions with solutions for the imbalance reserve product being developed in the day-ahead market enhancements initiative (DAME).

1. Proxy demand response eligibility (section 2):

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 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.

No comments at this time.

2. Ramp management between fifteen minute market and real-time dispatch (section 3):

No comments at this time.

3. Minimum FRP requirement for CAISO (section 4):

No comments at this time.

4. Deliverability enhancement (section 5 – 5.2):

- **Zonal vs. nodal procurement.**

Please provide comments on both pros/cons discussed in the paper.

PGP supports CAISO exploring improvements to the deliverability of the flexible ramping product, but does not yet have enough information to support the zonal or nodal approach to enhancing deliverability.

As discussed in our introductory remarks, improvements to the FRP have been identified as one of the most important steps to improve price performance in CAISO's markets. The issue paper presents two proposed solutions to improve FRP deliverability: zonal procurement and nodal procurement. PGP understands that both proposed solutions are intended to address the under-utilization of the flexible ramping product that occurs today due to the fact that the market does not consider locational constraints when procuring the FRP.

PGP appreciates CAISO outlining pros and cons associated with both options. As CAISO describes, the nodal procurement option is the more durable option to address operational concerns and more accurately prices flexibility, however, the implementation complexities and computational requirements are significant. The zonal procurement solution would operate similarly to how CAISO currently procures ancillary services and would involve less implementation/computational requirements, however, the approach to establish sub-regions appears complicated and could lead to unintended price outcomes. Notably, CAISO indicates that both options do not fully ensure deliverability of the FRP.

Given the information presented to-date, it is difficult to fully assess the impact of either option on the deliverability of the FRP and price performance more broadly in CAISO's markets. As a next step, it would be helpful if CAISO could provide further information about how either option may improve the real-time FRP and expected outcomes/improvements to the market overall. PGP understands other

stakeholders have requested that CAISO perform a simulation of the impact of choosing a nodal versus zonal constraint and PGP agrees that this could be useful to better understand the trade-offs between the two approaches.

5. EIM Governing Body classification (section 6.2):

No comments at this time.

6. Additional comments:

CAISO notes in the issue paper that the deliverability concerns that exist for the real-time RFP will also exist for the day-head imbalance reserve product being developed for the day-ahead market in the DAME initiative. CAISO states that the approach to address deliverability of the real time FRP can inform the approach to deliverability of day-ahead imbalance reserve product. Given that the largest uncertainty in the CAISO markets materializes between the day-ahead market and the real-time market, PGP questions whether an approach where the RT FRP informs the day-ahead imbalance reserve product is the most logical. It would seem more appropriate to develop in tandem a deliverability solution for the RT FRP and the day-ahead imbalance reserve product. This would help ensure the solution is designed with both markets equally in mind and/or could identify areas where the solutions may need to be tailored to a specific market.