



Stakeholder Comments Template

Flexible Ramping Product Refinements Initiative

This template has been created for submission of stakeholder comments on the draft final proposal and technical documents that were published on May 8, 2020. These materials can 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. Submissions are requested by close of business on June 2, 2020.

Submitted by	Organization	Date Submitted
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Please provide your organization’s overall position on the FRPR draft final 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:

PG&E supports CAISO’s effort to continue improving the deliverability and effectiveness of FRP. PG&E appreciates CAISO’s timely revision of the straw proposal based on stakeholders’ comments and supports changes made in the revised straw proposal.

1. Proxy Demand Response Eligibility:

PG&E supports CAISO’s intent to change the default setting of PDRs from 5-minute to 60-minute dispatchable. PG&E believes that it is reasonable to change the implementation date to Fall 2021 to accommodate the tariff change.

2. Ramp Management between fifteen minute market and real-time dispatch:

PG&E supports CAISO's change of reserving a 100% portion of FRP awards in the buffer interval of FMM runs.

3. Minimum Flexible Ramping Product Requirement for BAA:

PG&E supports having an interim solution before the full implementation of the proposed nodal approach. We appreciate the data analysis provided in the revised straw proposal to support the "60%" threshold for defining a pivotal BAA.

However, PG&E requests CAISO to clarify the motivation of enforcing the minimum FRP requirement for BAAs. On page 9, Section 6 of the proposal, it is mentioned:

"If the import capability is higher than a BAA's FRP requirement, ..., none FRP will be awarded to the BAA's internal resource. Since CAISO is the large driver of the systemwide FRP, a portion needs to be procured within CAISO to be available for the uncertainties to be materialized in CAISO."

It is not clear whether this minimum requirement is enforced because of (a) CAISO tends to fail the FRP sufficiency test, or (b) the awarded FRP in adjacent BAAs, which are to cover uncertainties in CAISO, is trapped behind the transmission congestions. While the provided data analysis may partially support the 60% threshold under former motivation, additional data may be needed to support the threshold under the later motivation.

4. Nodal Procurement:

PG&E appreciate CAISO's timely response to our comments in the previous round and supports the change in the revised proposal that (a) modeling the FRP surplus as decision variables at the LAP level, and (b) distributing FRP requirement to both demand and VER nodes.

However, PG&E requests that CAISO to further clarify the settlement of virtual and physical supply in the deployment scenarios. On page 18, Section 7 of the proposal, it is stated:

"CAISO proposes not to settle virtual and physical supply for congestion resulting from the deployment scenarios. This congestion from the deployment scenarios will be included in the real-time congestion offset."

While PG&E agrees that clearing against different demand composition in the IFM and RT markets will lead to a systematic difference between the DA and RT LMP, it is not clear from the technical draft and the price formation section:

- How the proposed settlement affects the net transfer in the power balance equation (page 10) and consequently the shadow price of FRP in the deployment scenarios.

- How the proposed settlement affects the shadow price of network constraints in the deployment scenarios, and consequently, LMP (page 21).

5. FRP Demand Curve and Scarcity Pricing:

PG&E has no further comments at this point.

6. Calculating FRP Requirements:

PG&E supports the adoption of a quantile regression approach and appreciate CAISO's provision of the related data analysis.

7. Additional comments: