

Comments of the California Energy Storage Alliance on the Flexible Ramping Product Refinements Initiative

| Submitted by | Organization | Date Submitted |
|-------------------------|--|----------------|
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| Please provide your organization's overall position on the FRPR draft proposal: | t final |
|---|---------|
| 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. Proxy Demand Response Eligibility:

CESA supports CAISO's proposal to modify the default bidding option for Proxy Demand Resources (PDRs) in order to guarantee the correct operation of the FRP scheme. As CESA has noted in previous comments within this initiative, any resource that seeks to provide FRP must be physically able to respond in a fast enough manner as to mitigate the uncertainty associated with load and generation variance between market optimization runs. Because of this, CESA is appreciative of the CAISO's outreach to scheduling coordinators (SCs) of PDRs in order to ensure they have selected the dispatch option that better reflects their actual operational characteristics. In light of the fact that most of them have correctly indicated their appropriate dispatch setting; CESA supports the ISO's decision to defer the target implementation date of this modification to Fall 2021, as it would minimize the administrative burden associated with this initiative and its nodal deliverability proposal.

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

CESA continues to support the CAISO's proposal to manage resources between the FMM and RTD market runs. CESA is also supportive of the ISO's decision to hold 100% of the FRP awards procured in the initial FMM run for buffer intervals.

3. Minimum Flexible Ramping Product Requirement for BAA:

CESA is partially supportive of the ISO's approach to establish minimum FRP requirements as it could provide limited incentives for procurement of quickly responsive assets beyond CAISO's footprint. CESA is appreciative of the ISO's proposed simplified methodology, as it clearly illustrates the need for an FRP minimum requirement might be driven by particular areas within the broader EIM. However, as the penetration of variable energy resources (VERs) increases across the EIM, the ISO should consider establishing a reduced requirement for non-pivotal BAAs.

In the Draft Final Proposal, the ISO mentions its intention to maintain the possibility of defining a nominal minimum for non-pivotal BAAs, using 10% for the example included in Table 6.¹ CESA considers this option should be made mandatory, as it would ease the procurement burden while still serving as a clear indicator of a BAA's FRP need. As to the exact percentage for this requirement, CESA defers to the ISO's experience to determine a viable portion for non-pivotal BAAs.

Finally, given the implementation of the nodal procurement approach has direct implications to the application of the minimum FRP requirement, CESA is supportive of the ISO's clarification stating that minimum BAA requirements will be maintained in the event that the nodal procurement scheme is delayed.

4. Nodal Procurement:

CESA is supportive of the ISO's proposal to apply nodal procurement for FRP as presented in the Draft Final Proposal. CESA supports this proposal as it ensures the feasibility of FRP dispatches and would eventually place added value to the flexibility provided by responsive assets. CESA is appreciative of the modifications done by the ISO to this proposal and provides further refinement recommendations below.

CESA is supportive of the ISO's decision to distribute uncertainty between load and VERs in the deployment scenarios; nevertheless, CESA urges the ISO to consider how this uncertainty shall be distributed among different VER technologies and classes. Due to regional and time variations in the resource mix, the ISO might need to evaluate different allocation schemes of uncertainty between solar and wind generation. CESA believes the use of historical data would be adequate to determine this distribution.

¹ Draft Final Proposal, at 13-14.

5. FRP Demand Curve and Scarcity Pricing:

CESA offers no comments at this time.

6. Calculating FRP Requirements:

CESA is supportive of the ISO's proposed transition to a quantile regression approach to calculate FRP requirements. As a need driven by the tails of the probability distribution, CESA agrees with the ISO's use of a quantile-based methodology that overcomes the limitations of historical, backward-looking, analysis.