

## Comments of Powerex Corp. on Flexible Ramping Product Refinements Straw Proposal

Submitted by	Company	Date Submitted
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Powerex appreciates the opportunity to submit comments respecting the CAISO’s November 21, 2019 Flexible Ramping Product Refinements Straw Proposal (“Straw proposal”) and related stakeholder presentation. As discussed further below:

- Powerex is generally supportive of the proposals that entail modification to business practices (*i.e.*, PDRs, enforcing FRP in the buffer interval, and establishing a minimum FRP requirement for the CAISO BAA, and potentially also for other EIM BAAs).
- Powerex supports defining BAA-specific minimum FRP procurement levels as a pragmatic near-term improvement over the *status quo*.
- Powerex believes a longer-term solution to ensure deliverability of FRP must be developed in light of the need to address a similar challenge associated with the new day-ahead imbalance reserve product, and that a successful solution must be compatible with the proposals being evaluated as part of the DAM Enhancements initiative.

### Proxy Demand Response Eligibility

The Straw Proposal identifies that proxy demand response (“PDR”) resources often receive Flexible Ramping Product (“FRP”) awards but are unable to respond to 5-minute energy awards when dispatched. The Straw Proposal explains that recent CAISO software enhancements will allow PDR resources to use the Master File to identify whether they are available for dispatch on a 5-minute, 15-minute or hourly basis, and that only resources identified as 5-minute dispatchable will be eligible for FRP awards.

Powerex is supportive of this improvement, but believes that these enhancements should be supplemented with further monitoring and review of whether PDR resources are actually capable of responding—and actually do respond—to CAISO dispatches at all. In addition to the challenges raised in the Straw Proposal, PDRs have also been specifically identified by the CAISO’s Department of Market Monitoring (“DMM”) as providing resource adequacy (“RA”) capacity, and submitting energy bids associated with those commitments, but failing to respond to energy dispatches when needed.<sup>1</sup> While the inability of some PDR resources to respond to isolated and

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<sup>1</sup> See, *e.g.*, CAISO DMM 2018 Annual Report on Market Issues and Performance, at 44-45. See also CAISO DMM 2019 Q3 Quarterly Report on Market Issues and Performance, at 91-92.

very short-term dispatches (e.g., an energy dispatch in a single 5-minute interval) may be one reason for this historical non-performance, the effectiveness of the proposed refinements should be evaluated after implementation. To the extent PDR resources continue to be unable to follow dispatch instructions when needed, it may be necessary to further evaluate the eligibility of such resources to be awarded FRP.

### **Ramp Management Between FMM and RTD**

The Straw Proposal explains that the quantity of FRP procured in FMM is intended to cover the uncertainty between the first advisory FMM interval and the highest/lowest binding RTD interval within that 15-minute timeframe. Currently, however, the CAISO software does not enforce FRP requirements in the “buffer” interval (the first FMM interval, immediately preceding the binding FMM interval), which can have the unintended effect of prematurely “releasing” capacity that was intended to be available for RTD. The Straw Proposal proposes to address this problem by enforcing an FRP requirement in the buffer interval.

Powerex supports enforcing an FRP requirement in the buffer interval to ensure flexibility remains available for RTD. However, the Straw Proposal states that it “proposes to maintain **a portion, up to 100%**, of the FRP awards in the buffer interval that were procured in the prior FMM.”<sup>2</sup> In order to more precisely define an appropriate FRP requirement that should be enforced in the buffer interval, Powerex suggests that CAISO perform an analysis to separate the total uncertainty requirements into two components:

- Uncertainty that generally materializes between the advisory FMM and the buffer interval; and
- Uncertainty that generally remains between the buffer interval and the maximum/minimum binding RTD run.

This analysis could help inform the appropriate quantity of FRP to enforce in the buffer interval.

### **Deliverability**

The Straw Proposal explains the CAISO’s current assessment of FRP deliverability is limited to assessing the transfer capability of each BAA to and from its directly adjacent BAAs, and fails to assess whether there is sufficient transfer capability to wheel through intermediate BAAs. Given the substantial net transfer capability that is generally available between the CAISO BAA and directly adjacent EIM BAAs, this often results in the CAISO BAA’s entire FRP requirement being awarded to resources located in other EIM BAAs, even when transfer limits across intermediate BAAs may hinder the ability to actually deliver FRP energy to the CAISO BAA when needed. The Straw Proposal proposes to apply a minimum FRP procurement requirement for the CAISO BAA (and potentially extend this concept to other EIM BAAs) through a change to its business practice manuals.

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<sup>2</sup> Straw Proposal at 5. (Emphasis added)

The Straw Proposal further explains that other deliverability challenges exist when a resource that receives an FRP award is upstream of a transmission constraint. Such constraints can either be between BAAs, or may be local constraints within a BAA. The Straw Proposal also notes that a similar challenge will need to be addressed in developing a new day-ahead imbalance reserve product, and suggests the CAISO and stakeholders consider whether to pursue a nodal or zonal approach to improving deliverability on a longer-term basis.

Powerex agrees that a successful long-term approach for FRP deliverability must be compatible with the improvements proposed in the DAM Enhancements initiative. The magnitude of day-ahead uncertainty that will need to be addressed through day-ahead imbalance reserves is much greater than the uncertainty in real-time. Therefore, a robust and durable approach to ensure deliverability will be critical to success in that initiative.

Powerex is generally supportive of a nodal approach as a long-term solution to improving FRP deliverability, and believes that such an approach is likely necessary to support the efficient procurement of day-ahead imbalance reserves. As explained in the Straw Proposal, a nodal approach is more likely to result in a feasible market solution and would support more efficient dispatch and pricing of flexible capacity.

While a zonal approach would be simpler to implement, Powerex believes it would be premature to decide on this approach as a long-term solution. In particular, such a decision must be made in light of further examination of whether this approach would be workable in a day-ahead context. Powerex believes the proposal to establish a minimum BAA-level FRP requirement for the CAISO BAA (and to potentially extend this approach to other EIM BAAs) is a logical first step that can be implemented quickly and will provide CAISO with more insight as to what extent such requirements improve deliverability. This information is likely to help inform whether a more fully-designed zonal approach is likely to be successful, while also providing more time for the DAM Enhancements proposal to be refined and for CAISO and stakeholders to consider appropriate alternatives in a day-ahead context.