Comments of Powerex Corp. on

Flexible Ramping Product Draft Technical Appendix

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Powerex appreciates the opportunity to comment on CAISO's June 10, 2015 Flexible Ramping Product Draft Technical Appendix ("Appendix"). As previously stated, Powerex strongly supports the development of market-based mechanisms to provide the CAISO with products that provide flexible ramping capability. The Appendix provides significant additional detail regarding how CAISO will determine the quantity of Flexible Ramping Up ("FRU") and Flexible Ramping Down ("FRD") capacity. Importantly, CAISO explicitly recognizes that there are two distinct drivers of the need for flexible ramping capacity: (1) the expected change in net demand between intervals; and (2) the uncertainty surrounding the change in net demand. Powerex has long supported this conceptual approach, as it appropriately recognizes that net demand will change as a result of both predictable and unpredictable factors.

While the Appendix provides additional detail regarding how the necessary quantity of FRU and FRD capacity will be calculated, CAISO has not addressed the serious defect in its cost allocation proposal for these products. Namely, CAISO continues to allocate flexible ramping product ("FRP") costs to intertie schedules in a manner that ignores the extent to which ramps at the interties can contribute to reducing flexible ramping needs and associated costs. As Powerex explained in its prior comments in this proceeding, not only is such a proposal contrary to basic cost causation principles, but it creates a disincentive for market participants to engage in activities that can reduce overall system flexible ramping costs.³ Under CAISO's cost allocation proposal, changes in market participants' intertie schedules can only attract FRP

¹ Cal. Indep. Sys. Operator Corp., Flexible Ramping Product: Draft Technical Appendix (June 10, 2015), available at: http://www.caiso.com/Documents/DraftTechnicalAppendix_FlexibleRampingProduct.pdf.

² *Id.* at 8. ("The FRP total requirement is calculated as the sum of the net demand forecast change across intervals and an additional amount for uncertainty within a 95% confidence interval.").

³ Comments of Powerex Corp. on Flexible Ramping Product Draft Final Proposal (Jan. 2, 2015), *available at*: http://www.caiso.com/Documents/PowerexComments_FlexibleRampingProduct-DraftFinalProposal.pdf.

costs and do not receive any credit for the extent to which they lead to a reduction in flexible ramping costs. Thus, rather than providing an incentive for market participants to increase or decrease imports to offset changes in load and/or renewable output, CAISO's proposal will create an incentive for importers to minimize their ramping activity as this is the only way to avoid exposure to flexible ramping charges. Because flexible ramping capacity charges will be most volatile during periods of significant changes in net demand, CAISO's proposal will discourage flexible intertie participation during those periods in which such participation is most needed.

Powerex is not alone in its belief that CAISO's proposal will create the wrong incentives. In fact, both the CAISO Department of Market Monitoring ("DMM") and California Public Utilities Commission ("CPUC") have echoed Powerex's concerns. For example, DMM stated that the cost allocation proposal contained in CAISO's Draft Final Proposal "could create incentives for interties to schedule in ways that reduce their exposure to flexible ramping product cost allocations but that are *inconsistent with efficient market scheduling and that increase overall FRP costs* (such as flattening their schedules during ramping periods)." While DMM did not propose a "system of credits and costs," it did conclude that "[t]he ISO should consider design options that limit the impact that FRP cost allocations have on creating adverse behavioral incentives." Similarly, the CPUC expressed "significant concerns" over the CAISO's proposed cost allocation, and urged CAISO "to ensure that the impact of intertie imports/exports on the FRP procurement requirement is appropriately reflected and *credited commensurate with their impact and cost causation principles*."

As an external supplier with a long history of actively participating in CAISO's markets, Powerex is well aware of the factors that influence external suppliers' decisions whether to bid into the CAISO markets. One major consideration is the supplier's exposure to fees and charges associated with participation in the market. To the extent these fees or charges can be reasonably anticipated, they may be factored into a participant's bids or offers. But if charges are unpredictable—and especially if they're both unpredictable and asymmetric—a participant's only reasonable option for managing exposure may be to avoid transactions that expose them to such charges. In the case of the FRP cost allocation, this would mean avoiding changes to hourly intertie schedules during the hours in which CAISO net system demand is expected to change rapidly.

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⁴ Comments of Department of Market Monitoring on Flexible Ramping Product Draft Final Proposal at 6 (Dec. 31, 2014) (emphasis added), available at: http://www.caiso.com/Documents/DMMComments_FlexibleRampingProduct-DraftFinalProposal.pdf

⁵ Comments of California Public Utilities Commission on Flexible Ramping Product Draft Final Proposal at 4 (Jan. 9, 2015) (emphasis added), *available at*. http://www.caiso.com/Documents/CPUCComments_FlexibleRampingProduct-DraftFinalProposal.pdf

Rather than adopting a cost allocation framework that reduces CAISO's options for managing changes in its net system demand, modest changes in the design of the CAISO's FRP could expand CAISO's options and ensure flexibility needs are met on a least-cost basis. In its Reliability Services Initiative, CAISO has acknowledged that, "with the proper rules and parameters in place, 15 minute intertie schedules can provide valuable upward and downward flexible capacity."6 Rather than hastily implementing a design that discourages intertie participation, CAISO should seize this opportunity to coordinate the development of both a 15minute intertie Flexible Resource Adequacy product together with a 15-minute FRP. This would provide for procurement of 15-minute dispatchable intertie resources on both a forward basis (through the 15-minute Flexible Resource Adequacy product) as well as on a day-ahead and real-time basis. It would also provide a more comprehensive basis for the allocation of any flexible ramping costs that CAISO incurs. Namely, Scheduling Coordinators with a Flexible Resource Adequacy obligation that did not perform would be charged for the replacement of that service at the applicable FRP price. To the extent CAISO procured FRP because its needs exceeded what had been procured through the Flexible Resource Adequacy product, those costs should be allocated consistent with cost-causation principles.

Powerex therefore urges CAISO to reconsider its proposed cost allocation methodology for the FRP. At a minimum, CAISO should avoid the asymmetrical charges to hourly intertie schedules; ideally, CAISO would use this opportunity to create a FRP that could actually be provided by 15-minute intertie resources. It has committed to evaluating that possibility in the context of its Flexible Resource Adequacy product, and it should do so in the context of the FRP as well. Properly designed and implemented, this could be a major step forward to CAISO availing itself of the significant flexible resources located outside the CAISO BAA by developing appropriate market-based products for that service.

⁶ Cal. Indep. Sys. Operator Corp., Reliability Services Initiative–Flexible Resource Adequacy Criteria and Must Offer Obligation–Phase 2: Issue Paper at 17 (June 25, 2015), available at: http://www.caiso.com/Documents/Phase2IssuePaper_ReliabilityServices_FlexibleRACriteria_MustOfferObligations.pdf

⁷ Powerex recognizes that the Appendix abandons the proposal for day-ahead procurement of FRP. Nevertheless, the schedules determined in the day-ahead market imply a need for FRP, even if procurement of the associated product is deferred until real-time.