## **Contingency Modeling Enhancements** Third Revised Straw Proposal

Submitted by	Company	Date Submitted
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Powerex appreciates the opportunity to comment upon CAISO's November 20, 2015 Third Revised Straw Proposal on Contingency Modeling Enhancements. In the Third Revised Straw Proposal, CAISO proposes to establish a preventive-corrective constraint in its Day-Ahead and Real-Time market optimization to ensure that CAISO has sufficient capability to respond to contingency events and return flows on critical transmission paths to its system operating limit or interconnection reliability operating limit within 30 minutes of a contingency. Under CAISO's proposal, resources procured to manage the constraint—referred to as "corrective capacity"—will receive compensation based on a locational marginal capacity price ("LMCP"). In order to offset these payments and maintain revenue adequacy, CAISO proposes to reduce the net revenues paid to holders of Congestion Revenue Rights ("CRR") by requiring those holders to accept Contingency CRRs ("CCRR"), a new type of CRR associated with each contingency that will settle against the difference in LMCPs between the defined injection and withdrawal points.

Powerex strongly supports CAISO's proposal to establish a preventive-corrective constraint to ensure that CAISO's market optimization results in the procurement and positioning of the resources necessary to effectively address system disturbances within the timeline prescribed by applicable reliability standards. Powerex is optimistic that taking into account the need to respond to contingencies affecting critical transmission paths in CAISO's market optimization will reduce reliance upon exceptional dispatch and other out-of-market tools that can prevent market prices from accurately reflecting the value of resources needed to meet system needs. Powerex further supports CAISO's decision to establish a market-based mechanism for compensating resources that provide corrective capacity.

Powerex also appreciates CAISO's sensitivity to the pressing issue of CRR revenue inadequacy. As CAISO's Department of Market Monitoring ("DMM") recognized in an October 6, 2014 report, there was over \$200 million in CRR revenue inadequacy in CAISO between September 2013 and August 2014. DMM's most recent quarterly report on market issues and performance notes that, while CRR revenue inadequacy has been "accumulating at a slower pace than 2014, revenue inadequacy in the first

<sup>&</sup>lt;sup>1</sup> Cal. Indep. Sys. Operator Corp., Allocating CRR Revenue Inadequacy by Constraint to CRR Holders at 1 (Oct. 6, 2014) ("October 6 Report"), available at https://www.caiso.com/Documents/AllocatingCRRRevenueInadequacy-Constraint-

CRRHolders DMMWhitePaper.pdf. Powerex believes that this figure does not reflect the contribution of auction revenues.

nine months of 2015 remains elevated compared to previous years at \$96 million" before accounting for auction revenues.<sup>2</sup>

Powerex is concerned, however, about CAISO's introduction of a new and complex approach to addressing CAISO revenue inadequacy, especially at the relatively late stage of an ongoing stakeholder proceeding focused on ensuring that CAISO has the tools and resources necessary to respond to contingency events. As an initial matter, while Powerex agrees that the Third Straw Proposal would result in CAISO revenue inadequacy, it does not necessarily agree that this is properly viewed as *CRR* revenue inadequacy. Moreover, as DMM recognized in its October 2014 report, there are numerous factors that drive CRR revenue inadequacy, including unexpected or unmodeled transmission outages, differences in the granularity of the CRR and Day-Ahead Market models, general modeling discrepancies and errors, and unsettled flows in the Day-Ahead Market.<sup>3</sup> The corrective constraints being proposed will be merely one factor among many that drive CRR revenue inadequacy.

Rather than attempting to address a single cause of CAISO day-ahead revenue inadequacy in this proceeding. Powerex requests that CAISO consider separating the issues of contingency modeling enhancements on the one hand, and comprehensively addressing CRR revenue inadequacy on the other. As illustrated by the complexity of CAISO's proposal in this docket, addressing revenue inadequacy is a complicated issue that warrants careful consideration by both CAISO and stakeholders. Yet CAISO's "CCRR" proposal was not introduced until the most recent straw proposal—over 2.5 years after this stakeholder proceeding commenced and only a few months before CAISO plans to bring its proposal to the CAISO Board for approval. Rather than attempting to address this complex issue on an expedited basis in this proceeding, Powerex recommends that CAISO proceed with its proposed modeling enhancements<sup>4</sup> while considering how to address revenue inadequacy associated with contingency modeling enhancements as part of a comprehensive effort to address CRR revenue inadequacy in a separate stakeholder process. This will afford both CAISO and stakeholders with the time necessary to thoroughly evaluate how best to resolve these issues. In addition, such an approach will allow stakeholders to address the issue of CRR revenue inadequacy on a more holistic basis, minimizing the risk of unintended consequences that comes with "one-off" or "piecemeal" solutions. Powerex further urges the CAISO to consider commencement of a separate stakeholder process on CRR revenue inadequacy as soon as possible, given the magnitude of the issue.

<sup>&</sup>lt;sup>2</sup> Cal. Indep. Sys. Operator Corp., Dept. of Market Monitoring, Q3 2015 Report on Market Issues and Performance at 2 (Nov. 16, 2015), *available at* https://www.caiso.com/Documents/2015ThirdQuarterReport-MarketIssuesandPerformance-November2015.pdf.

<sup>&</sup>lt;sup>3</sup> October 6 Report at 8-11.

<sup>&</sup>lt;sup>4</sup> In this case, Powerex believes that it would be appropriate for CAISO to revert to its previous proposal for allocating the costs of corrective capacity or to take interim steps to prevent against the possibility that implementation of the constraint will drive up revenue inadequacy. For instance, CAISO could adjust or de-rate CRRs over certain critical paths in advance of the next annual CRR auction in order to reduce the risk of revenue inadequacy during the upcoming year while giving stakeholders adequate time to consider more comprehensive reforms.

Regarding the specific proposal for allocating the additional costs of contingency modeling enhancements, Powerex is deeply concerned that CAISO's specific proposal may significantly erode the value (and increase the risk) of CRRs and, in so doing, may actually exacerbate—rather than avoid—further revenue inadequacy. As Powerex understands the CAISO's proposal, CAISO will not reduce the quantity of CRRs that it allocates or award in its auctions, which will continue to be limited by a Simultaneous Feasibility Test based on the current N-1 criterion. CAISO will, however, reduce the net congestion revenues received by CRR holders by the value of CCRRs. Because this reduction is applied on an after-the-fact basis based on the results of the Day-Ahead Market, market participants may be less willing to purchase CRRs, which, in turn, would reduce auction revenues. To the extent that the reduction in CRR auction revenues exceeds the revenue "clawed back" through the CCRR, the result may be a *net increase* in CRR revenue inadequacy.<sup>5</sup>

Further, the proposed after-the-fact approach to addressing contingency modeling-related revenue inadequacy would undermine one of the core purposes of CRRs – to hedge physical congestion charges. Specifically, under the CAISO's proposed approach, a CRR holder will have little way of knowing the extent to which its CRRs will actually serve as a hedge to its exposure to congestion charges at the time that it submits its bids and schedules into the Day-Ahead Market. Such uncertainty significantly impedes the intended use of CRRs as a tool for hedging congestion charges associated with physical transactions.

Instead of an unpredictable after-the-fact reduction of CRR holders' congestion revenues, Powerex believes CAISO should consider two alternatives in this stakeholder process. First, as an interim measure, recover the cost associated with enforcing contingency modeling enhancements through uplift. This approach would be replaced with the more comprehensive solution developed through the CRR revenue insufficiency stakeholder process recommended above. Second, if CAISO determines that it must develop an allocation process for the cost of enforcing contingency modeling enhancements (i.e., with those costs no longer recovered through uplift charges) it would be beneficial for CAISO to consider other steps that can be taken to inform CRR holders of any required limitations on their CRRs in advance of the Day-Ahead Market. Such advance notification will at least make CRR holders aware of what congestion charges will or will not be hedged by the CRR in which they invested. For instance, CAISO could volumetrically "de-rate" CRRs prior to Day-Ahead Market operations to reflect anticipated transmission availability. Powerex believes that these and other options should be considered in the context of the broader stakeholder proceeding discussed above, and it would welcome the opportunity to work collaboratively with the CAISO and other stakeholders to address these critical issues.

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<sup>&</sup>lt;sup>5</sup> Powerex notes that a difference between Day-Ahead Market congestion revenues and CRR payments is not, in and of itself, undesirable. It is when this financial liability is insufficiently compensated through CRR auction proceeds that significant concerns arise. Rule changes that increase the risk and uncertainty of purchasing CRRs may only exacerbate this problem.