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SVP Comments on CAISO CRR Auction Efficiency Policy Phase - Stakeholder Working Group

Submitted by	Company	Date Submitted
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In response to the CAISO's request for feedback, Silicon Valley Power (SVP) submits the following comments on the on the California Independent System Operator Corporation's (CAISO) Congestion Revenue Rights (CRR) Auction Efficiency Policy Phase - Stakeholder Working Group Presentation, dated December 19, 2017 (CRR Presentation).

SVP appreciates the CAISO's efforts in evaluating potential causes of systematic differences between CRR auction revenues and CRR payouts, and also appreciates the extensive analysis summarized in the CRR Presentation comprising historical CRR auctions/market performance, modelling of transmission outages and detailed analysis of auctions for representative months. As SVP indicated in its December 6th comments, SVP has reached a conclusion that minor fixes or tweaks to the auction design won't solve the CRR auction efficiency problem – and thus it is time to completely revamp the CAISO's auction design policy. Rather than performing additional analysis or implementing incremental fixes that only partially address the CRR auction efficiency design issue, we believe now is the time to directly address the inherent problem of LSEs being forced to sell auction CRRs by the current CRR auction design. In order to achieve this goal, SVP suggests a two-prong approach, where both the prongs can be implemented in parallel this year before the annual CRR auction process for 2019 is conducted.

The first prong would include implementing the CAISO's proposed solutions to have better outage modeling and constraint enforcement modeling as outlined in Slides 6-12 of the CAISO policy phase presentation.[1] The CAISO-proposed actions of constraint and contingency enforcements, and outage modeling have the merits of improving the overall CRR allocation and auction process regardless of the changes made to the auction design to minimize or eliminate net payment deficiency in the CRR auction.

The second prong would entail implementing SCE's proposal[2] to no longer "reserve" CRRs for the auction process but instead release all (properly derated) transmission for the allocation process and require all auction CRRs to be between willing counterparties to ensure LSE ratepayers are not harmed by the CRR auction.[3] SVP believes that this approach can be achieved very swiftly and effectively using the existing Auction CRR FNM model and setting all the line

[1]Process changes include regular reporting in market performance reports of PTO outage submittal performance, enhancing CRR outage process to identify and define nomogram constraints in the monthly CRR auction timeframe, identifying where external outage information is available in advance and utilizing this information to appropriately enforce interface constraints in the CRR auction, etc. "CRR Auction Efficiency Policy Phase - Stakeholder Working Group Presentation," Perry Servedio, CAISO, December 19, 2017.

[2] SCE Proposal, http://www.caiso.com/Documents/SCEComments-CRRAuctionAnalysisReport.pdf, posted on December 11, 2017.

[3] See SVP Comments on CAISO CRR Auction Analysis Report, dated December 6, 2017, pp.1-3.

capacities to zero by applying a 100% Global De-rate Factor (GDF)[4] for the seasonal and monthly auction CRR processes.[5] SVP urges the CAISO to consider incorporating the 100% GDF for the CRR auctions into the Phase I process improvements that can be implemented in the BPM process without a Tariff amendment.

While SVP believes that a CRR auction with no transmission capacity set-asides would be the most expeditious way to address the CRR auction efficiency issues, SVP believes a purely bilateral forward contract market (that does not require the CRR FNM) also would achieve this goal, as suggested by the Department of Market Monitoring (DMM).[6] However, we believe that rather than developing a new framework to facilitate buying or selling of forward contracts to hedge or speculate on locational price differences, it would be more cost-effective and efficient for the CAISO to implement the SCE proposal for ensuring CRR auction transactions only between willing counterparties by applying a 100% Global Derate Factor in the existing CRR auction model.

As part of the December 19th CRR presentation, the CAISO identified potential initial objectives for addressing the CRR auction efficiency issue:

1. Minimize net payment deficiency in the CRR auction
2. Maintain market efficiencies associated with ensuring all market participants have the opportunity to obtain congestion hedges.

In Table 1 below, we discuss the effectiveness at meeting the proposed objectives of each of the potential solutions identified by CAISO. With the exception of implementing the SCE proposal for ensuring only transactions between willing counterparties with no transmission set-asides (or implementing a bilateral forward contract-based solution), all the proposed solutions fail to adequately address one or both of the proposed objectives.

Table 1: CAISO-Proposed Potential Solutions to CRR Auction Efficiency- Effectiveness at Meeting Objectives

Potential Solution	Discussion of Effectiveness and Potential Issues
No policy changes	Does nothing to address the CRR auction efficiency issue and therefore fails to address the objective of minimizing net payment deficiency in the CRR auction (Objective 1).
Monthly granularity annual auction	This change could actually make the auction efficiency problem worse as it would allow the market participants to target specific monthly auction CRRs (rather than quarterly as it is done in the current auction design) and underprice them in order to extract higher net CRR payments at ratepayer expense. Fails to meet Objective 1.

[4] Currently the CAISO derates the CRR FNM by a GDF each month for the allocation and auction CRR processes to account for expected outages that will remain in service within the CRR Full Network Model or expected outages with short duration that are not studied in a power flow analysis. See the CAISO CRR Business Practice Manual (BPM), Section 10.3.2.B.

[5] SVP acknowledges that there might be alternative ways of setting all the line capacities to zero in the seasonal and monthly auction CRR processes, and would be interested in knowing the CAISO CRR team's thoughts on their implementation.

[6] DMM recommends a bilateral or exchange market for forward contracts for price differences between pairs of nodes as an alternative to the current auction design. See "Problems in the performance and design of the congestion revenue right auction, "November 27, 2017, Department of Market Monitoring, pp.27-28.

Potential Solution	Discussion of Effectiveness and Potential Issues
Limit source-sink pairings associated with hedging physical deliveries	This solution appears to allow for some parity between the allocation and auction process, however, market participants could easily bypass this restriction by bidding for CRRs from one pricing node (pNode) source to a trading hub (TH) and then bidding for a separate CRR for that TH to another pNode. This would allow them to effectively get an auction CRR from one pNode to another as is allowable under the current auction design. To counter this practice, the source-sink pairings would need to be restricted to CRRs from pNodes to TH (or DLAP), but this would prevent parties from unwinding allocated CRRs. This potential solution thus fails either Objective 1 or Objective 2.
Limit eligible injections/withdrawals on electrically equivalent nodes in CRR model	This is a potentially good solution to tackle the specific tactic applied by some auction participants of extracting congestion rents at ratepayer expense without enhancing any liquidity in the CRR or underlying wholesale energy commodity markets. However, it would only address a fraction of the undervalued CRRs and thus fails to address Objective 1.
Create constraint reserve prices	This potential solution is fraught with a number of issues, including who would determine a reserve price for each constraint and how it would be determined. Moreover, there likely would be major challenges to develop reserve prices for each constraint for every time of use period for each season/month. The CAISO also would need to address how to accommodate parties that want to unwind allocated CRRs (e.g., allow those parties to set their own CRR reserve prices by virtue of their bids). This solution might be capable of addressing both Objective 1 and Objective 2, but implementation challenges make success unlikely.
Allow only aggregate locations for sources and sinks to ease liquidity	If individual pNodes or Intertie Scheduling Points are not allowed as sources, it seems unlikely that this solution would adequately address Objective 2.
Cost-causation based allocation of revenue deficiency to PTOs	Identifying and allocating revenue deficiency to specific sources (e.g., outages that were not reported in time to be included in the CRR modeling) would be a difficult undertaking and likely would prompt many disputes. It also goes beyond the auction issues and has implications for allocation CRRs that are beyond the scope of this initiative. In addition to these drawbacks, this solution is unlikely to fully address the CRR auction efficiency issue and therefore fails Objective 1.
Day-ahead volumetric de-rates of CRRs	This potential solution will be highly complicated from an accounting standpoint. It would be extremely complicated to have different de-rates applied to CRRs on a daily basis for every combination of locations, and to track and clearly communicate the information for settlements. It also goes beyond the auction issues and has implications for allocation CRRs that are beyond the scope of this initiative. In addition to these drawbacks, this solution is unlikely to fully address the CRR auction efficiency issue and therefore fails

Potential Solution	Discussion of Effectiveness and Potential Issues
	Objective 1. It also would undercut the hedging value of the CRRs by reducing the amount of the CRR hedge protection, and thus may not adequately address Objective 2.
Require full funding of CRRs among all CRR holders	This solution would make CRR allocation participants bear a portion of the revenue inadequacy burden caused by the auction participants. Moreover, as the DMM has repeatedly explained, the issue at hand is CRR auction efficiency (including auction competitiveness) and not revenue inadequacy. This solution is unlikely to fully address the CRR auction efficiency issue and therefore fails Objective 1. It also would undercut the hedging value of the CRRs by reducing the amount of the CRR hedge protection, and thus may not adequately address Objective 2.
Rework the balancing account into two: allocation balancing account and auction balancing account, require full funding among participants in each balancing account	This solution raises several questions on how full funding among participants in each (allocation and auction) balancing account would be achieved. Would it be done separately for on and off-peak periods? Would the revenue inadequacy be spread over the CRR auction holders based upon the quantity (MW) or the dollar impact of the CRRs that they hold on the level of revenue inadequacy? In any case, it fails to directly address the underlying CRR auction efficiency issue and therefore fails to address Objective 1. It also would undercut the hedging value of the CRRs by reducing the amount of the CRR hedge protection, and thus may not adequately address Objective 2.
Model daily granularity in CRR auction, award only CRRs feasible on all days	This solution may reduce the level of magnitude of the CRR auction efficiency issue, but may not fully address the underlying CRR auction efficiency issue and therefore may not fully address Objective 1. It also would undercut the hedging value of the CRRs by reducing the amount of the CRR hedge protection, and thus may not adequately address Objective 2.
Award daily granularity CRRs	This solution seems likely to create its own challenges, without necessarily addressing the underlying problem. With daily CRRs, for each season, there would be 180 auctions instead of two (peak and off-peak). Managing such a large number of auctions would be administratively challenging and could increase the amount of net payment deficiency given that only one aspect of the source of net payment deficiency is being addressed. The CAISO's analysis suggests a high degree of unpredictability of transmission outages, so attempting to model such outages during a specific day within a quarter seems unrealistic. This solution, therefore, seems unlikely to fully address Objective 1. It also would undercut the hedging value of the CRRs by reducing the amount of the CRR hedge protection, and thus may not adequately address Objective 2.
Eliminate auction, replace with some form of swap market (limited hubs with or without swap pool, nodal	This solution addresses objective 1 and objective 2, but would be more difficult to implement than using the existing CRR auction model and simply setting the auction line capacities to zero by applying a Global Derate Factor of 100%. CFTC issues also would need to be addressed, since the current exemption from CFTC swap regulation applies only

Potential Solution	Discussion of Effectiveness and Potential Issues
swaps)	to Financial Transmission Rights (FTR) markets "where each FTR is linked to, and the aggregate volume of FTRs for any period of time is limited by, the physical capability (after accounting for counterflow) of the electric energy transmission system operated by the" RTO/ISO.[7]
Eliminate auction and have only allocation process	This solution addresses objective 1, but may fail to address objective 2 if a bilateral forward contract market does not develop.

Given the challenges and pitfalls associated with most of the alternative fixes considered by the CAISO as summarized in Table 1, SVP strongly recommends implementing the SCE proposal for ensuring only transactions between willing counterparties with no transmission set-asides by applying a Global Derate Factor of 100% in the existing CRR auction model. Alternatively, a bilateral forward contract-based solution could be pursued, but the potential CFTC issues should be addressed immediately so that it could be implemented without delay.

SVP appreciates the opportunity to comment on this very important issue, and looks forward to working with the CAISO and other stakeholders in implementing a robust and balanced revised auction design.

[7] Final Order, 78 Fed. Reg. 63 (April 2, 2013)