

Stakeholder Comments CRR Auction Efficiency Policy Phase – Stakeholder Working Group

Submitted by	Company	Date Submitted
Wei Zhou – (626) 302 3273 Hossein Daneshi – (626) 302 2567	Southern California Edison	Jan 12, 2018

Southern California Edison (SCE) appreciates the opportunity to provide comments on the California Independent System Operator’s (CAISO) Congestion Revenue Right (CRR) Auction Analysis Working Group discussion¹.

SCE supports the general effort of improving modeling accuracy, such as improving outage mapping, constraint management, and other modeling improvements to ensure consistent models across the markets. While SCE supports such effort, misalignment between CRR and Day-Ahead models *will* exist as CRR models are forward-looking models that represent an entire season or month of DA market hours. Put differently, the model variation used in the DAM can be 400 times (monthly) or 1200 times (seasonal) greater than the model used in the CRR market². This is an inherent problem and can only be resolved through a change to the CRR auction design. Another fundamental issue of the current auction design is that load is *forced* to pay for the CRR underfunding, and this issue can only be resolved through a design change.

As shown by the DMM, load in the CAISO has lost over \$680 million since 2009 – or about \$75 million per year³. Such a high amount of underfunding was accumulated despite numerous modeling improvements that have been made by the CAISO⁴, including:

- Break-even algorithm implementation for interties
- Break-even algorithm for internal transmission
- Nodal group and other transmission constraint enforcement
- Internal outage process improvements
- CRR clawback rule modification, etc.

Among other stakeholders, SCE continues to urge the CAISO to change the current CRR auction to the one that is conducted among willing counterparties. In particular, SCE has put forth its proposal⁵. The SCE proposal allows parties to hedge, *and* speculate, the value of CRRs, without forcing load to pick up the tab of CRR underfunding. Auction underfunding will be completely

¹ CAISO Working Group material, <http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=3A7E34B5-54C3-40CD-9BCD-F5E81E658E66>, dated December 19, 2017.

² See stakeholder presentation material at <http://www.caiso.com/Documents/Presentation-CristySanadaPGE-Dec192017.pdf> (p. 3), which shows that, for Q1 2017, there are 1216 on-peak hours in the DAM while the CRR market only uses 1 snapshot. Similarly, for January 2017, there are 400 on-peak hours in the DAM while the CRR market only uses 1 snapshot.

³ http://www.caiso.com/Documents/TestimonyofEricHildebrandt_Nov29.pdf

⁴ CAISO Presentation, p2, <http://www.caiso.com/Documents/Presentation-CRRAuctionEfficiencyPolicyDiscussion-Dec192017.pdf>, dated December 19, 2017.

⁵ SCE Proposal, <http://www.caiso.com/Documents/SCEComments-CRRAuctionAnalysisReport.pdf>, posted on December 11, 2017.

avoided in SCE’s proposal. Under this proposal, the CAISO would no longer “reserve” CRRs for the auction process but instead would release everything to the allocation process (the remainder of the allocation process would be conducted as it is in the CAISO tariff today and would not require the CAISO or LSEs seeking CRRs in an allocation to do anything differently than today). In addition to the allocation of system inherent CRRs, the CAISO can conduct an auction to allow willing counterparties to create a CRR by bidding equal and opposite flows. Those that funded the transmission grid and created congestion revenue by paying more than what generation receives (i.e. load) would not be exposed to results of this auction process, unless they willingly participate in it.

At present, the only other documented proposal was from the DMM.⁶ This proposal is based on their analyses of the last several years. In essence, the DMM proposes to eliminate the current auction, or replace the current auction with a swap market that can be administered by the CAISO or a third party. Both the SCE proposal and the DMM proposal will fully address the paramount CRR underfunding issue as both proposals would only allow transactions among willing counterparties. SCE supports either proposal⁷.

SCE notices that the CAISO has listed a variety of alternative solution ideas in its presentation⁸. As there is lack of details for those potential solutions, SCE offers its high-level observations below for discussion purposes. These observations are preliminary and subject to change when additional information becomes available to SCE.

SCE supports the CAISO’s schedule to complete the policy discussion finalizing a proposal that can *fully* address the paramount CRR underfunding issue before this summer⁹.

Table 1: Initial high-level observation on the solution ideas listed by the ISO

CRR Auction Solution Idea Listed by the CAISO	Initial High-level Observation(subject to change)
No policy changes	Not acceptable as it does not address the fundamental issue of CRR underfunding (i.e., the issue of inappropriate uplift to load under the current auction design)
Monthly granularity annual auction	Has not been shown that this option can address the fundamental issue of the CRR underfunding. This option makes the process more complicated especially for long-term CRR allocations
Limit source-sink pairings associated with hedging physical deliveries	No details of this option. Has not been shown this option can address the fundamental issue of the CRR underfunding
Limit eligible injections/withdrawals on electrically equivalent nodes in CRR model	No details of this option. Has not been shown this option can address the fundamental issue of the CRR underfunding
Create constraint reserve prices	No details on how the reserve prices would be set, how effectively it can prevent CRR underfunding, and how it can

⁶ DMM Proposal, <http://www.caiso.com/Documents/DMMWhitePaper-Market Alternatives CongestionRevenueRightsAuction-Nov27 2017.pdf>

⁷ At this stage, SCE prefers its own proposal but finds the DMM proposal as an acceptable alternative.

⁸ CAISO Presentation, pp. 16-17.

⁹ CAISO Presentation, p. 19: Draft Final Proposal by May 2018, ISO BOG Presentation by July 2018.

	address the fundamental issue of the CRR underfunding (i.e., will load still be forced to fund CRR revenue deficiencies)
Allow only aggregate locations for sources and sinks to ease liquidity	Has not been shown this option can address the fundamental issue of the CRR underfunding
Cost-causation based allocation of revenue deficiency to participating transmission owners	The PTO is not the entity that auctioned CRRs that are infeasible and cause under-funding. This is identical to the fact that load also did not auction a CRR that was not feasible. This option does not fundamentally alter the shortfalls of the current system nor does it address the appropriate allocation of costs when a failure occurs.
Day-ahead volumetric de-rates of CRRs	No details of this option. Has not been shown this option can address the fundamental issue of the CRR underfunding
Require full funding of CRRs among all CRR holders	FERC has already required full funding of CRRs. It is this full funding that has led to the CAISO implementing a system that funds any under collection with an uplift to load. It is not clear then how this element is different in any way from the status quo.
Rework the balancing account into two: allocation balancing account and auction balancing account, require full funding among participants in each balancing account	This option does not address the fact that a CRR which exists due to the funding of a transmission grid and the payment by load in excess of revenues received by generation are auctioned to non-load without any consideration for the desires of the load that made the CRR feasible and funded. In short, the current CRR auction mechanism is one in which a willing buyer purchases from a forced seller.
Model daily granularity in CRR auction, award only CRRs feasible on all days	No details of this option. Has not been shown this option can address the fundamental issue of the CRR underfunding. Likely to introduce complexity and very likely to over-constrain the CRR provision
Award daily granularity CRRs	No details of this option. Has not been shown this option can address the fundamental issue of the CRR underfunding. Unclear how this will be accomplished (e.g., will there be 1200 on-peak snapshots in the CRR auction? How will the CAISO award CRRs with daily granularity during annual process?)
Eliminate auction as we know it, replace with swap market of limited hubs, allow swap pool to take acceptable market price risk	Acceptable. This option can address the fundamental issue of CRR underfunding
Eliminate auction as we know it, replace with swap market of limited hubs	Acceptable. This option can address the fundamental issue of CRR underfunding
Eliminate auction as we know it, replace with nodal swap market	Strongly support if this is same as SCE proposal
Eliminate auction as we know it and have only an allocation process for the full capacity	Acceptable. This option can address the fundamental issue of CRR underfunding