DC Energy, Comments on Congestion Revenue Rights Auction (CRR) Auction Efficiency Draft Final Proposal

Submitted by	Company	Date Submitted
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DC Energy appreciates the opportunity to provide comments on the CAISO's CRR Auction Efficiency Draft Final Proposal published on February 8, 2018 and the CRR Auction Efficiency meeting held on February 13, 2018 ("February CRR meeting"). While DC Energy agrees with the CAISO's overall objective of improving CRR auction efficiency, DC Energy is not in complete agreement on all aspects of the current proposal. Below, DC Energy provides comments in support of the CAISO's action plan and proposals to improve CRR auction models and related processes. Next, DC Energy comments on proposals to restrict CRR activity and decrease market transparency. Lastly, DC Energy presents a better path forward to achieve increased CRR auction efficiency.

I. ***DC Energy supports the CAISO's action plan to improve CRR auction models and the proposal to reserve more system capacity to the monthly CRR processes. These measures would address the root causes of CRR inefficiency:*** The record demonstrating the need for CRR model and outage submission improvements has been well established. The following entities supported this approach to resolving CRR auction inefficiency: The Alliance For Retail Energy Markets, Amber Power, Appian Way, Boston Energy, DC Energy, Calpine, Load Serving Entities in Support of Market Efficiency and the CRR Auction[1], Western Power Trading Forum, Valley Electric Association, and Velocity American Energy. DC Energy agrees with the CAISO that its action plan to expand the application of enforced constraints and contingencies, and transmission outages in CRR actions would help minimize "net payment deficiency" and CRR revenue inadequacy. Today, there are many instances where unenforced constraints in the CRR auction end up binding in the Integrated Forward Market (IFM). In addition, even enforced constraints may fail to bind due to a lack of enforced contingencies. The CAISO's proposal addresses the source of these issues and enables competitive forces to better rationalize CRR auction prices. In the Draft Final Proposal, the CAISO proposed tariff changes that would reserve more capacity for the monthly CRR processes and establish transmission submission requirements in the annual CRR processes. These changes would promote CRR auction efficiency by improving outage information and offering more capacity when constraint and contingency enforcement is more accurate. SPP faced similar

[1] This group includes: Alliance for Retail Energy Markets; Arizona Electric Power Cooperative; Calpine Energy Solutions, LLC; Direct Energy, LP; Just Energy Solutions, Inc.; Shell Energy North America (US), L.P.; Valley Electric Association, Inc.

challenges with CRR revenue adequacy before FERC directed SPP to reduce the amount of capacity released for its annual Auction Revenue Right process.[2]

II. DC Energy agrees that, over time, it is a desirable outcome for CRR auction price discovery to efficiently reflect future congestion rents (and, therefore, fund CRR Auction Revenue Distribution). DC Energy submits this objective is better served by continuing to improve the auction models and eliminating electrically equivalent CRR pairs than by proposals that create artificial barriers to competition.

a. ***The elimination of "non-delivery pair" CRRs would not lead to increased competition on "delivery pair" CRRs or help to minimize the CAISO's stated objective to minimize net payment deficiency. The overarching impact would be less competition, fewer awarded CRRs, and lower realized auction revenues*:** The CAISO conducted a counterfactual auction simulation where "non-delivery pair" CRRs bids were removed from the auction. This resulted in overall average CRR prices increasing from $113/MW to $147/MW. The CAISO believed this increase indicated that "non-delivery" pair transactions are not placing meaningful competitive flows on constraints. In addition, the CAISO's expectation is that "non-delivery pair" activity tied to hedging would shift to "delivery pair" CRR paths. The CAISO projected the end result would be increased competition for the allowable paths and the elimination of a source of net payment deficiency.[3] DC Energy does not agree with these conclusions and highlights the following two flaws:

   First, the average clearing price metric can lead one to think more auction revenue is being realized through the appearance of increased competition, when in fact the opposite is occurring. The objective function of the CRR auction is to maximize bid-based auction revenues. Removing awarded transactions from the auction means one is removing competitively awarded flow and therefore this approach cannot be relied on as a means to increase competition in a network of related transactions. The important point missing in CAISO's narrative is that overall auction revenue decreased significantly in the counterfactual simulation despite the apparent increase in CRR average clearing price (i.e. $113 to $147). This is because cleared volume decreased by almost 75% while prices increased by only 30%, resulting in an overall decline in auction

[2] On February 19th, FERC accepted SPP's proposal to reduce its 100% system capability assumption in the annual ARR allocation process to 90% for the July through September period and directed SPP to lower it to 60% from 100% for the period of October through May (https://www.ferc.gov/CalendarFiles/20160219124544-ER16-13-000.pdf)

[3] CAISO's Draft Final proposal 35 at 36

revenues by 65%.[5] This will only exacerbate the observed "net payment deficiency".

Second, there is no additional data to support the CAISO's conclusions that despite this decrease to auction revenues, greater competition would be expected on "delivery pair" CRRs; the existing bidding using "non-delivery pairs" already effectively competes against "delivery pair" CRRs for the same network capacity. The current levels of competition are already more efficient than any that CAISO may be seeking to force on "delivery pairs." Therefore, it is not logical to expect that a highly restrictive filter on allowable bids will somehow create more competition on "delivery pair" transactions or help the CAISO carry out its objective to minimize "net payment deficiency."

For the reasons stated above, DC Energy submits the actual outcome of the proposed CRR restrictions would be fewer awarded CRRs and reduced competition across the network. This would lead to less overall auction revenue, as demonstrated in CAISO's counterfactual CRR analysis, and would not facilitate the CAISO's objective of minimizing "net payment deficiency." The CAISO's efforts are best placed in the areas of improving its models and auction structure and in this way, they can provide a better platform where competitive forces derive the value of transmission system capacity.

b. ***It is erroneous to submit that "non-delivery pair" CRRs hinder the ability of "delivery pair" CRRs to clear and therefore are not serving a useful purpose with regard to CRR auction efficiency***: The CAISO counterfactual auction simulation showed that "non-delivery pair" transactions did not provide for the clearing of more "delivery pair" transactions. The CAISO used this finding to support its conclusion that non-delivery path CRRs were not useful in terms of providing counter-flow. Therefore, the CAISO proposed restricting CRRs with source-sink pairs that directly counter-flow "delivery pair" CRRs (see Table 1 below: e.g., from Hub or Load Aggregation Point (LAP) to resource node and LAP to Hub CRR pairs). This conclusion is flawed. A "non-delivery" pair transaction should not need to be counter-flowing to be considered competitive because, regardless of its directionality, it is competing with bids under the objective function to maximize bid-based revenue.

   As stated in the previous section removing awarded transactions from the clearing means, by definition, one is removing competitively awarded flow. It is puzzling that the CAISO seeks to segment certain transaction and insist they need be counter-flowing in order to be deemed useful. Using this rationale to impose artificial barriers submits the market to the whims of an arbitrary

[5] Actual auction 66,000 MW "non-delivery pairs" cleared and 17,000 MW "delivery-pair" rights cleared the auction, but yet counterfactual only 22,000 MW of delivery-pair rights cleared (66GW + 17GW - 22GW) = 61GW

classification and undefined cost/benefit conclusions. Assuming *arguendo* that directionality was relevant in determining competitiveness of a "non-delivery pair" transaction, it is unclear how the CAISO came to the conclusion that it is acceptable to eliminate the counter-flow within the aggregate finding. Furthermore, the CAISO is justifying its proposal based on MW counter-flow when the value of counter-flow provided would be a more relevant metric. Lastly, it is unclear why the CAISO's proposal seeks to eliminate some counter-flow transactions that if cleared, would always clear room for "delivery pair" transactions (e.g., from Hub or LAP to resource node and LAP to Hub CRR pairs).

Table 1: The ISO has proposed to restrict source/sink pairs in the auction to those indicated below:

		Sink				
Source		LAPs	GEN	PNODE	TIE	TH
	LAPs					
	GEN	Y			Y	Y
	PNODE					
	TIE	Y				Y
	TH	Y			Y	

c. **The CAISO's designation of which transactions are required to efficiently hedge forward contracts for physical supply delivery is not rooted in a factual understanding of electric markets and is troublesome given many market participants currently use the CAISO deemed "non-delivery" pair transaction to efficiently manage physical supply risk:** It is not apparent how the CAISO arrived at its determinations of which paths are required to efficiently hedge supply delivery; yet, it is clear that the conclusions fail to consider the actual workings of the electric market. Among the CRRs being eliminated are pairs where both the source and sink are resource nodes. These transactions are used within a portfolio of resources to move supply from one resource to another for things like maintenance, forced outages, fuel supply risk and weather deviations. Or a power marketer may need to pick up a new resource mid-year to replace a contract that is expiring. For instance, a power marketer with a tolling agreement off of one resource could hedge its contract with CRRs, but if negotiations for an expected extension of that contract fail, the power marketer could secure power from a different resource. In such cases, a CRR between the two generation nodes is the most efficient way to hedge the new basis risk.

Furthermore, financial entities use CRRs within a portfolio of products in order to provide risk management and hedging services to other market participants. At the February CRR Working Group meeting, a direct access LSE explained how financial entities can use the CRR market to hedge targeted risk in their portfolio,

which provides a means to offer more competitively priced basis products in the over-the-counter market. The CAISO's determination of what is required to efficiently hedge is at odds with the market. Furthermore, the imposition of these extreme restrictions would disrupt risk management practices that have developed under the nodal market framework. To date the CAISO's narrative has not attempted to address these concerns. It is unclear why the CAISO is elevating its perspective above the needs of market participants, but surely this approach will lead to unintended consequences and place roadblocks that challenge competition in the wholesale and retail power markets.

d. ***DC Energy agrees electrically equivalent CRR pairs need to be eliminated form auction clearing. This smaller subset of transaction within the CAISO proposed restrictions serve no useful purpose and contribute to net payment deficiency***: Electrically equivalent CRR pairs cannot produce CRR auction value and therefore can contribute to net payment deficiency. It is problematic that the CAISO proposed to eliminate a much larger set of transactions[6] when there is considerable precedent on how to efficiently address these transactions; as ERCOT, SPP, and PJM have all implemented these restrictions. DC Energy reiterates its support for this restriction, which would address CRR net payment deficiency without interfering with auction competition.

III. CAISO's proposal to eliminate the disclosure of certain auction information will impair appropriate price formation and work counter to the initiative's objective to minimize net payment deficiency in the CRR auction: In the Draft Final Proposal the CAISO proposed to not disclose certain information used in the CRR auction. The information set includes modeled outages, enforced constraints and contingencies. The premise of the proposal is that CRR bids should be based on the expected grid condition of the day-ahead markets, and not the congestion revenue rights model itself.[7] DC Energy submits this approach would not facilitate the CAISO's objective of minimizing net payment deficiency since it would impair the ability to value future congestion outcomes. This artificial uncertainty would translate to higher forward risk premiums, which would be reflected in CRR bids. In addition, the CAISO states it will ensure market participants have all required information to determine expected day-ahead market results. While DC Energy agrees this transparency is important, the enforced contingencies and constraints in the auction provide this very insight. Therefore, it is not clear the CAISO's proposal would in fact provide more relevant information for assessing day-ahead outcomes. Lastly, DC Energy submits that the proposed reduction in transparency could make it challenging to understand auction results, which could erode the ability to detect market clearing errors and, therefore, reduce confidence in the clearing outcomes of the auction.

[6] The CAISO's proposal removed over 60GW of cleared transaction in the 2018 season 3 counterfactual simulation
[7] https://www.caiso.com/Documents/Presentation-CRRAuctionEfficiencyPolicyDiscussion-Dec192017.pdf at P. 15

IV. ***The upcoming Track 2 policy review process represents an opportunity to adopt proposals that would foster even greater CRR auction efficiency***: DC Energy advocates for a review of expanded auction structures utilized in other ISO/RTOs, which include more frequent auctions and longer-dated tenors. These auction structures were supported in the CRR initiative by the Alliance For Retail Energy Markets, Boston Energy Trading and Marketing, Calpine Solutions, and NRG. As delineated in our January 12th comments, these structures can help rationalize CRR clearing prices since all market participants would benefit from more up-to-date pricing and constraint information and allow for more frequent marking-to-market for CRR credit requirements.

V. **Summary**: In closing, DC Energy submits the CAISO's proposal and supporting findings have significantly relied on a selective and flawed set of findings and conclusion. The CRR pair restrictions would impair competition, subject the market to arbitrary determinations, and disrupt risk management practices. More importantly, DC Energy has shown the best path forward is to continue to improve the models, eliminate electrically equivalent CRR pairs, and adopt more advanced auction structure found in other ISOs/RTOs. These improvements would facilitate greater CRR auction efficiency while preserving competition.