

Comments Regarding the Transition to Auction Revenue Rights (ARRs) in the California ISO

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Customized Energy Solutions (Customized) appreciates the opportunity to submit comments on the CAISO's proposal to transition to from the allocation of Congestion Revenue Rights (CRR) to an Auction Revenue Rights (ARRs) approach. Customized has been actively involved in the CAISO CRR auction and allocation process. In addition, Customized has been actively participating on behalf of its clients in the ARR allocation processes since their inception in both PJM and the Midwest ISO. As such, these comments are based on our experience with the implementation and operation of the ARR process in these markets.

The following comments are submitted in response to the California ISO's request for stakeholder input on the broad proposal of transitioning into an ARR allocation process during the CRR enhancements discussion on September 8th, 2009. This document does not advocate for any particular position. Instead, we would like to share our expertise and understanding of the ARR concept and offer our views on how the proposed CRR enhancements presented by the California ISO may be affected by the implementation of an ARR construct. Customized welcomes the opportunity to contribute to dynamic and well informed discussions aimed at continuously promoting transparent and efficient operation of organized electricity markets.

1 Overview

As implemented in MISO and PJM, an ARR entitles its holder to a share of the revenue collected by the ISO in the CRR¹ auction, based on the auction clearing price of the ARR path. As such, ARRs are defined as point-to-point rights, with effective periods that usually coincide with the periods in the annual CRR auction. For example, if a Market Participant holds a Season 1 off-peak ARR from pricing point A to pricing point B for 10 MW, and in the auction for that season and time of use, the CRR from A to B costs \$5 per MW, the ARR holder will receive a credit of \$50. An ARR may also represent an obligation if the clearing price of the ARR path is negative.

In several RTOs, the allocation of ARRs replaces the direct allocation of CRRs to load or other firm transmission customers. ARRs provide a means to distribute the revenue collected from auctioning the transmission capacity in the form of CRRs back to those who pay the embedded cost of the transmission system.

Based on the premise that transmission customers within a given utility area share the cost of building transmission infrastructure through their rates, independently of the location of their owned or contracted generation resources, all LSEs serving load within a zone are entitled to request ARRs from the same set of historical resources.

ARRs are allocated annually, similar to the way the California ISO currently allocates CRRs to LSEs and OBAALSEs. The allocation of ARRs is subject to a feasibility test to ensure that revenues collected from the CRR auction are sufficient for the ISO to meet its obligations with ARR holders.

¹ The instruments equivalent to the California ISO's Congestion Revenue Rights (CRRs) are referred to as Financial Transmission Rights (FTRs) in both PJM and MISO. For the purpose of this document, the California ISO nomenclature is employed.

Both PJM and MISO offer the opportunity for ARR holders to “self-schedule” their ARRs in the auction, which amounts to giving up ARR credits (or charges) and instead directly converting all or part of their ARRs into CRRs. Self scheduling ARRs may be seen as entering a bid for the corresponding CRR into the auction at a very high price that results in the bid being cleared as non-marginal. The ARR payment offsets the cost of purchasing the CRR.

ARRs are allocated to LSEs based on their load serving obligation within each zone. Whether ARRs are self-scheduled or settled in the CRR auction, when load migration occurs, ARRs (or their associated payments) are moved from the entity gaining load to the entity losing load. If an LSE losing load self-scheduled 100% of its allocated ARRs, it will be responsible for paying the cost of a portion of the self-scheduled CRRs at the auction price, as the ARR payments will no longer offset the CRR price. Ideally, the LSE losing load should have the option of selling its “surplus” CRRs in the monthly auction.

The case described above illustrates how the implementation of a sell feature in the CRR auction would not become obsolete with the adoption of an ARR construct.

The following paragraphs offer our comments regarding the impact of such construct on this and other proposed CRR system and process enhancements.

2 CRR Related Credit Issues

The allocation of ARRs does not imply (or allow) the elimination of the annual or monthly CRR auction. If deemed currently necessary, the proposed enhancements related to CRR credit issues (pre-auction credit requirement, re-sale of defaulting entities’ CRRs and re-evaluation of CRR holding requirements for extraordinary circumstances) will still be required after the implementation of ARRs.

The definition of credit requirements –if any– associated to acquiring or holding ARRs may be necessary as part of the implementation process.

3 Non-Credit Policy Issues

3.1 Load migration process

While the use of ARRs has a considerable impact in the treatment of allocated rights under load migration, it does not eliminate in itself the need for the ISO to handle data on retail end-use customers. The ISO is still required to collect information that will determine the proper share of ARR payments (or charges) to be transferred between LSEs in the event of load migration.

In a PJM like construct, the ISO can be absolved of handling the load data of retail end-use customers. In the PJM area (which covers states with active retail choice programs) the Electric Distribution Companies (EDCs), who already have the infrastructure in place to track customer movements, are required to submit load switching data. If the CAISO were to utilize this approach, the data required from EDCs could be at a less granular level than what is currently provided. This approach would be an incremental change to the current practice. The ISO, therefore, could limit itself to transfer ARRs based on data received from distribution companies.

3.2 Modeling and treatment of trading hubs in CRR allocation and elimination of multi-point CRRs

The decision to disaggregate trading hubs in the CRR allocation can be transferred to the ARR allocation. The advantages (potential of higher allocation volumes) and disadvantages (proliferation of allocated paths) of disaggregating trading hubs apply to ARRs.

The same general logic applies to the elimination of multi-point CRRs. It is, of course, important to avoid the complexities of the implementation of multi-point ARR if multi-point rights are to be subsequently eliminated.

3.3 Weighted least squares objective function

A weighted least squares objective function may be used when allocating ARRs. If this objective is found to be more equitable when allocating CRRs, it is likely to be deemed more equitable in the ARR allocation as well. Since this is a change at the calculation-engine level, it is likely that the software changes would not be lost when transitioning to an ARR allocation, as the allocation problem remains mathematically largely unchanged, even if the allocated instruments are considerably different.

3.4 Move to single tier in monthly allocation

While conceivably a different implementation may be adopted by the California ISO, in the Midwest ISO the allocation of ARRs eliminated the monthly allocation processes. PJM does not hold monthly allocations either.

3.5 Sale of CRRs in the CRR auctions

As explained above, the transition to an ARR allocation process does not eliminate or reduce the need to allow for CRR holders to sell their positions in the CRR auction.

Since ARRs are settled based on CRR auction clearing prices, the implementation of an ARR allocation may warrant a *tiered annual auction* process to allow for more effective price discovery. The sell feature may be implemented in such a way that CRRs self-scheduled or purchased in one tier or round may be sold in subsequent auction rounds.

3.6 Modeling approaches to reinforce CRR revenue adequacy

In other markets, all the transmission capacity that is to be released in allocated rights, is done so during the annual process (i.e., there is no residual monthly allocation). With this type of implementation, the ISO would lose its ability to fine tune the final available transmission capacity after receiving the 30-day outage information.

3.7 Tracking of Long Term CRRs in CRR system

The implementation of ARRs may require the conversion of (or the option to convert) long term CRRs into long term ARRs. This is one of the many details that would need to be further evaluated during the stakeholder process that may lead to the transition to ARRs. It is likely that better tracking of long term rights will still be necessary after the transition.

Again, Customized appreciates the opportunity to share our experience with the California ISO as they consider moving toward an ARR construct. Please feel free to contact us for clarifications and any additional details that may facilitate a successful stakeholder process on this topic.

Thank you.