

Comments on Congestion Revenue Rights Enhancements

Working Group Meeting #3 – February 27, 2025

Department of Market Monitoring

March 26, 2025

Summary

The Department of Market Monitoring (DMM) appreciates the opportunity to comment on the *Congestion Revenue Rights Enhancements Working Group Meeting Session #3 – February 27, 2025*.¹ In this working group meeting, the ISO presented analysis of congestion revenue rights (CRR) market performance. After over a year of additional analysis, the ISO's main findings are that root causes leading to revenue inadequacy are:

1. Shift factors truncated by the minimum threshold;
2. Non-settled loop flows consuming transmission capacity; and
3. Differences between the CRR and day-ahead transmission models.

All of these issues have existed as long as the ISO has had CRRs, and have been subject to extensive analysis by the ISO. It is unclear how these issues can be resolved to stop overall revenue inadequacy or transmission ratepayer auction losses when they have not been resolved over the past 15 years or after the 2018 CRR stakeholder process. Continuing to dedicate time and resources in an attempt to make small improvements to these areas is not an effective use of either.

Ironically, the ISO's analysis fails to include mention what is probably the main cause of revenue inadequacy—the losses from CRRs sold by the ISO in the CRR auction. As summarized in the next section of these comments, analysis by DMM indicates that without the losses stemming from CRRs sold by the ISO in the auction, there would be sufficient revenue for full funding of all allocated CRRs without deficit offsets.

For these reasons, DMM continues to recommend that the ISO focus its efforts on a more comprehensive redesign of the CRR process, such as an auction that is based on willing sellers, which would more completely address these and other issues.

DMM continues to recommend a CRR auction based on willing sellers

DMM continues to recommend that the ISO develop a CRR auction design based on willing sellers, and that development of such an approach be the top priority for the current congestion revenue rights enhancements initiative. The willing seller auction would not depend on quixotic attempts to resolve differences between the transmission models used in CRR auction and those used in the day-ahead market. Unlike the current CRR auction design, the hedging products in the willing seller approach do

¹ *Congestion Revenue Rights Enhancements, Working Group Meeting Session #3*, California ISO, February 27, 2025 (with follow up meeting on March 12): <https://stakeholdercenter.caiso.com/InitiativeDocuments/Presentation-Congestion-Revenue-Rights-Enhancements-Mar-12-2025.pdf>

not rely on an estimated transmission model, are consistently defined between the auction and day-ahead market settlements, and are inherently fully funded by a willing counterparty.

Losses for transmission ratepayers from the current CRR auction are significant and sustained, and ultimately the result of auction clearing based on CRR prices that do not reflect the expected value of day-ahead congestion. The losses occur under the design from the combination of CRRs effectively offered for sale by the ISO at a \$0 offer price, and bids to buy such CRRs that can be well below the true expected value of day-ahead congestion. In addition to addressing ratepayer losses resulting from the current CRR auction design, this willing seller design would mitigate several of the largest issues raised by various stakeholders, including:

- (1) Problems encountered by load serving entities (LSEs) in the CRR allocation process;
- (2) The reduction in hedging benefits caused by the deficit offset charges; and
- (3) Concerns about overall CRR revenue adequacy.

As explained in DMM's prior paper and comments, under the willing seller design, the ISO would continue to allocate CRRs to load serving entities and exporters under the current allocation process.² Entities that are allocated CRRs in this process could continue to sell (or buy) CRRs as willing counterparties in the subsequent willing seller auction for CRRs.

Furthermore, as explained in recent DMM comments in this initiative, restrictions placed on CRR allocations, bidding, and payouts in 2019 would be removed. This would increase the ability of LSEs to acquire the CRRs, and realize CRR payments, needed to hedge their sources of supply.³ This willing seller design would allow for:

- Increased CRR allocations to LSEs;
- Removal of the revenue inadequacy offsets; and
- Removal of the current restrictions on allowable source-sink combinations.

² *Willing seller market design for congestion revenue rights*, Department of Market Monitoring, October 23, 2024, pp 11 and 14: <https://www.caiso.com/documents/willing-counterparty-whitepaper-oct-23-2024.pdf>

³ *Comments on Congestion Revenue Rights Enhancements Working Group Meeting #2*, Department of Market Monitoring, February 14, 2025: <https://www.caiso.com/documents/dmm-comments-on-congestion-revenue-rights-enhancements-jan-28-2025-working-group-meeting-no-2-feb-14-2025.pdf>

Historical data suggest allocated CRRs could be fully funded with revenue surpluses if losses from CRRs auctioned by the ISO are eliminated

Analysis by DMM indicates that without the losses stemming from CRRs sold by the ISO in the auction, there would be sufficient revenue for full funding of all allocated CRRs without risk of revenue inadequacy.

Since Q3 2020, paying all allocated CRRs at full notional value (without deficit offsets) would have resulted in an overall revenue surplus of 17 percent of day-ahead congestion rent (see Figures 1 and 2).⁴ Excluding Q1 2024, which includes effects from the January 2024 extreme cold weather event in the Pacific Northwest, the surplus would have been 15 percent of congestion rent.

Overall, CRRs—including the auction—have had notional revenue shortfalls of about 25 percent of congestion rent since Q3 2020. This highlights that under the current design, the CRRs sold by the ISO in the auction are what drives overall CRRs to be revenue inadequate. The current CRR transmission modeling constrains transmission ratepayers to a set of allocated CRRs that have a total notional payout significantly less than day-ahead congestion rents, while at the same time allowing the ISO to sell additional CRRs in the auction that drive overall CRR notional values significantly above day-ahead congestion rents.

⁴ Note that this value is corrected from earlier DMM comments. Earlier DMM comments had this surplus at 30 percent, but the settlements database included “congestion rent” from the ISO’s day-ahead nodal pricing mechanism, which is not settled. Data were also extended through the end of 2024.

Figure 1. Revenue surplus after payment of full notional value of allocated CRRs

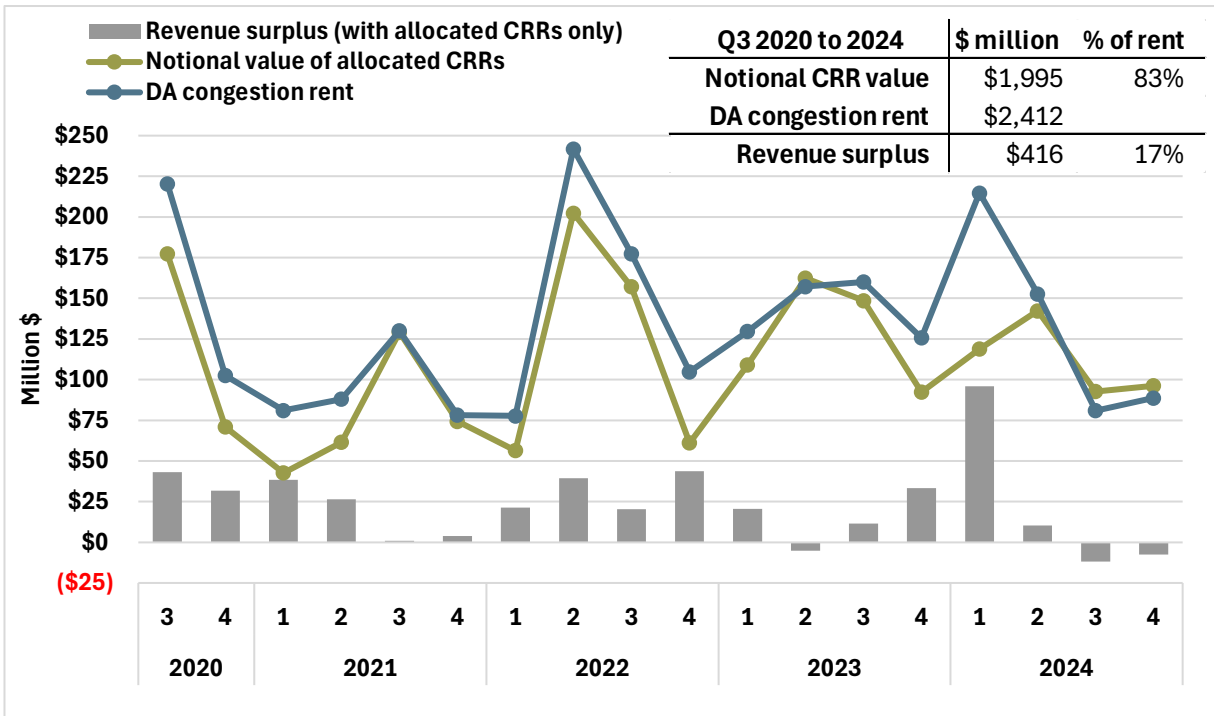


Figure 2. Revenue surplus after payment of full notional value of allocated CRRs

