

July 26, 2017

CAISO Governing Board Members (Via Email)

Dear CAISO Governing Board Members,

On behalf of the Western Power Trading Forum (WPTF), I would like to express my deep appreciation for your interest in the Congestion Revenue Right (CRR) issues we have raised with several of you. Each of you expressed a willingness to meet with WPTF, and for that we are grateful. Having met with a few of you thus far we found your attention to be keen and appreciated your inquisitiveness. Those of us from WPTF felt you heard our perspective – especially with respect to the importance of the CRR instrument to the overall market well-being and the ability to deliver energy to load most efficiently.

We found commonality with you that the analysis that the CAISO staff is conducting will be instrumental in evaluating any policy reconsideration.

The CAISO staff has completed some initial CRR analysis, and they continue to work to decipher the drivers of CRR revenue inadequacy and significant mismatches between auction prices and payouts. The CAISO captured select results of their analysis in this month's Market Performance and Planning Forum slide set and discussed some of these slides with stakeholders at that forum.<sup>1</sup>

Attached to this memo is a short excerpt of results from the CAISO's analysis. We believe the early results reflect that the CRR auction does have broad participation, that a variety of transmission elements has driven the gap between auction prices and payouts, and that these payout gaps have not had predictable patterns. The data also seems to show participants' portfolio payout results that are rational, and that the CAISO's over-issuance of rights –leading to revenue inadequacy – is still the largest problem influencing LSE CRR uplifts.

WPTF remains keenly interested in the CAISO's root cause analysis of the CRR auction, payout and revenue inadequacy, as well as in any consideration of policy changes driven by this valuable analysis. Once again, we thank the Board for your continued interest in this issue and look forward to further discussions with Board members as more study results become available.

Sincerely,

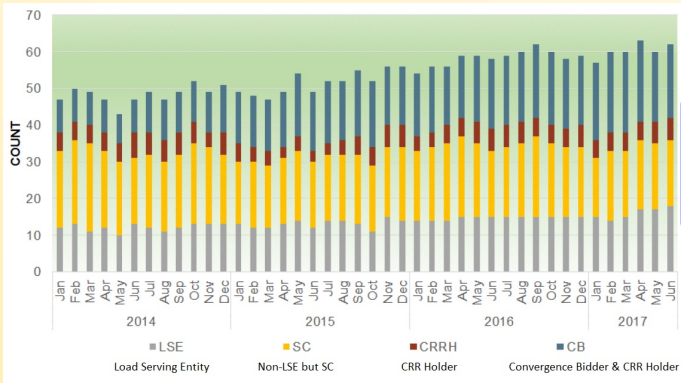
*Ellen A. Wolfe*

Ellen Wolfe, for WPTF

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<sup>1</sup> [http://www.caiso.com/Documents/Agenda-Presentation\\_MarketPerformance-PlanningForum-Jul18\\_2017.pdf](http://www.caiso.com/Documents/Agenda-Presentation_MarketPerformance-PlanningForum-Jul18_2017.pdf). See slides 3F6 – 42 and slides 96 – 150.

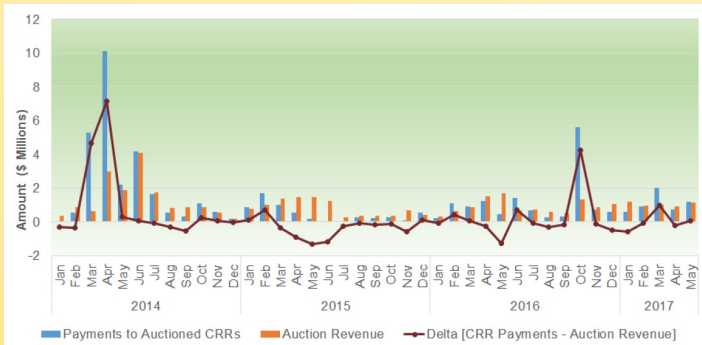
# WPTF CRR UPDATE: Early ISO Analysis\* Reveals No Systematic CRR Biases or Distortions



Over the last 3 ½ years, there has been a stable mix of participant entity types in the CRR auction demonstrating that all segments of the market find value in this process

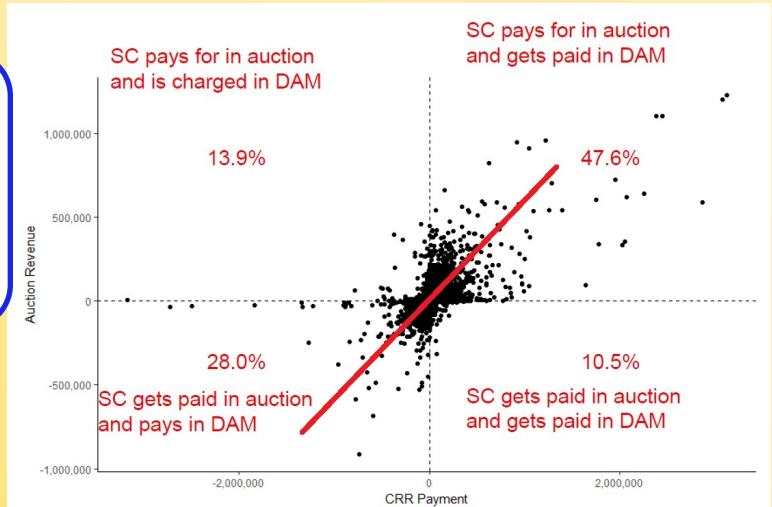
The ISO provides this list of top ten CRRs with high payout to clearing price differences. The top culprits are sporadic which indicates that there is not a systemic problem at the constraint

CRR_SOURCE	CRR_SINK
MALIN_5_N101	TH_NP15_GEN-APND
SYLMARDC_2_N501	TH_NP15_GEN-APND
PALOVDRDE_ASR-APND	TH_SP15_GEN-APND
PALOVDRDE_ASR-APND	C643TM1_7_N001
POD_GATES_6_PL1X2-APND	POD_HELMPG_7_UNIT 2-APND
POD_LAROA2_2_UNITA1-APND	TH_SP15_GEN-APND
MALIN_5_N101	TH_SP15_GEN-APND
DLAP_SCE-APND	FOURCORN_5_N501
AGUCALG1_7_B1	NGILA1_5_N001
POD_LAROA1_2_UNITA1-APND	TH_SP15_GEN-APND



This chart provides a time series of auction payouts and revenues from a representative constraint. The volatility underscores that there is not a systematic constraint-level distortion

In any auction process, there are winners and losers. Here you can see what you would intuitively expect: over 75% of the time, participants pay for a valuable hedge or sell back an allocated position. The other 25% of the times reflect imperfect information



## The Path Forward...

- Continue Analysis
- Share Interim Findings with Working Group
- Ensure Focus on Revenue Adequacy
- Ensure Any Policy Changes are Informed by Data Analysis and Consider Broader Costs & Benefits

\* These charts are taken from the ISO's MPPF presentation on 7/18/2017