



Congestion Revenue Rights Auction Efficiency – Track 1B

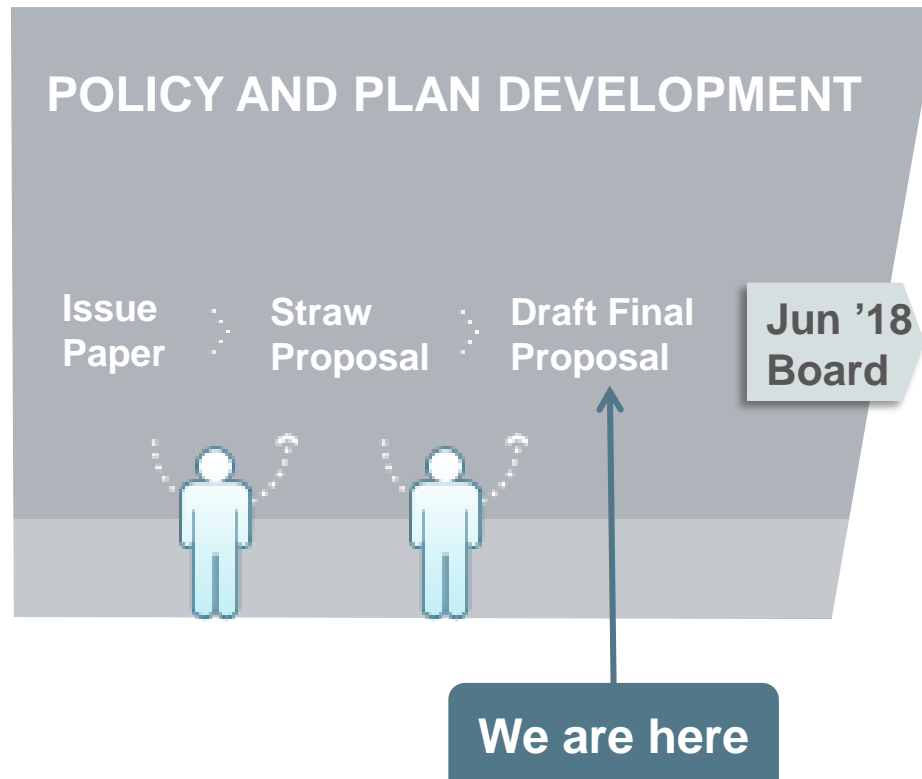
Perry Servedio
Sr. Market Design Policy Developer

Stakeholder Web Conference
May 18, 2018
9 a.m. – 12 p.m. (PDT)

Agenda

Time	Item	Speaker
9:00 - 9:10	Introduction	James Bishara
9:10 - 11:50	Draft Final Proposal, Scope and Background	Perry Servedio
11:50 - 12:00	Next Steps	James Bishara

CAISO policy initiative stakeholder process

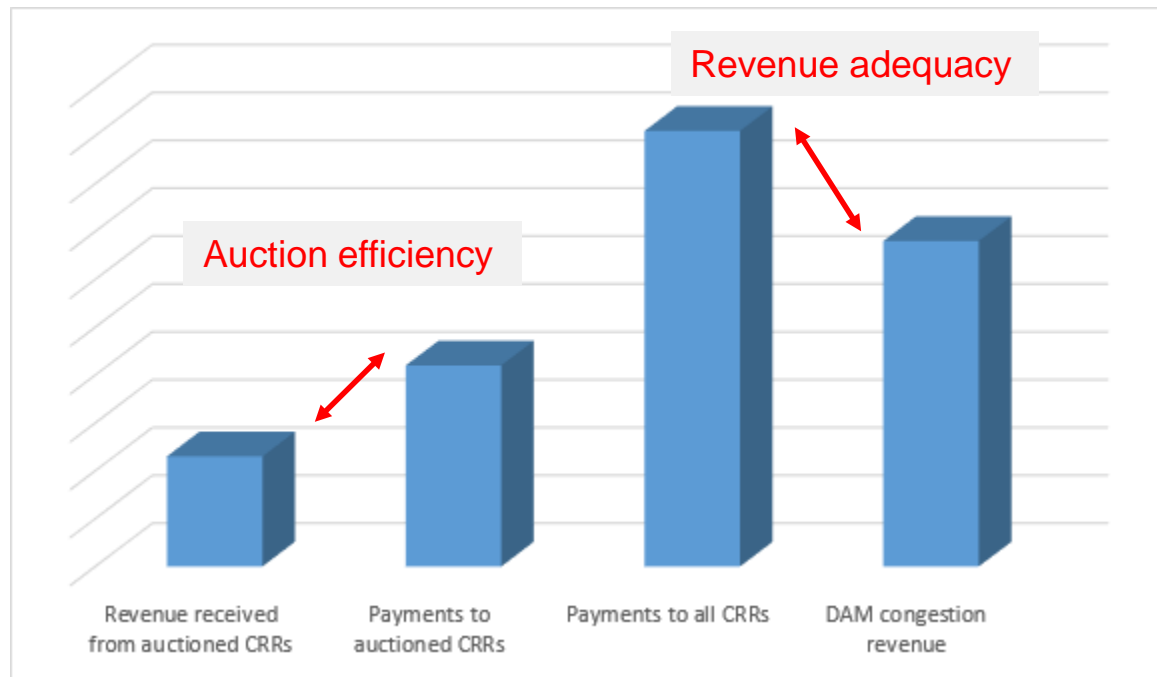


Roadmap for addressing congestion revenue rights auction efficiency

- **Track 0:** Process changes under current authority
 - Ongoing
- **Track 1A:** Implement measures in time for annual 2019 congestion revenue rights process
 - FERC filing last week
- **Track 1B:** Implement measures in time for 2019 congestion revenue rights settlement
 - Target June BOG
- **Track 2:** Potential comprehensive changes

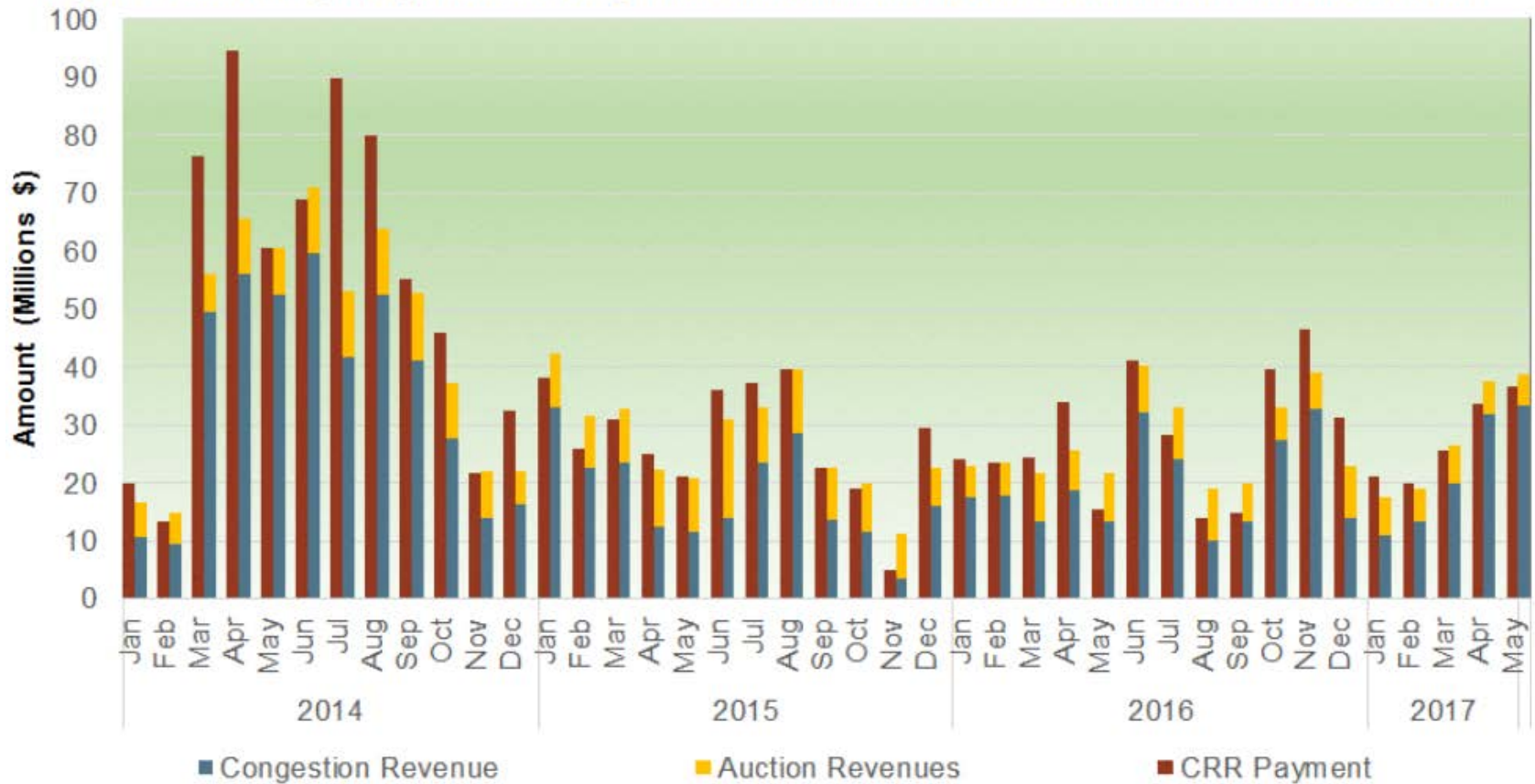
This presentation is focused on Track 1B

Track 1A specifically improves auction efficiency, Track 1B achieves equitable allocation of revenue inadequacy while also improving auction efficiency



Measured demand currently pays overall shortfalls

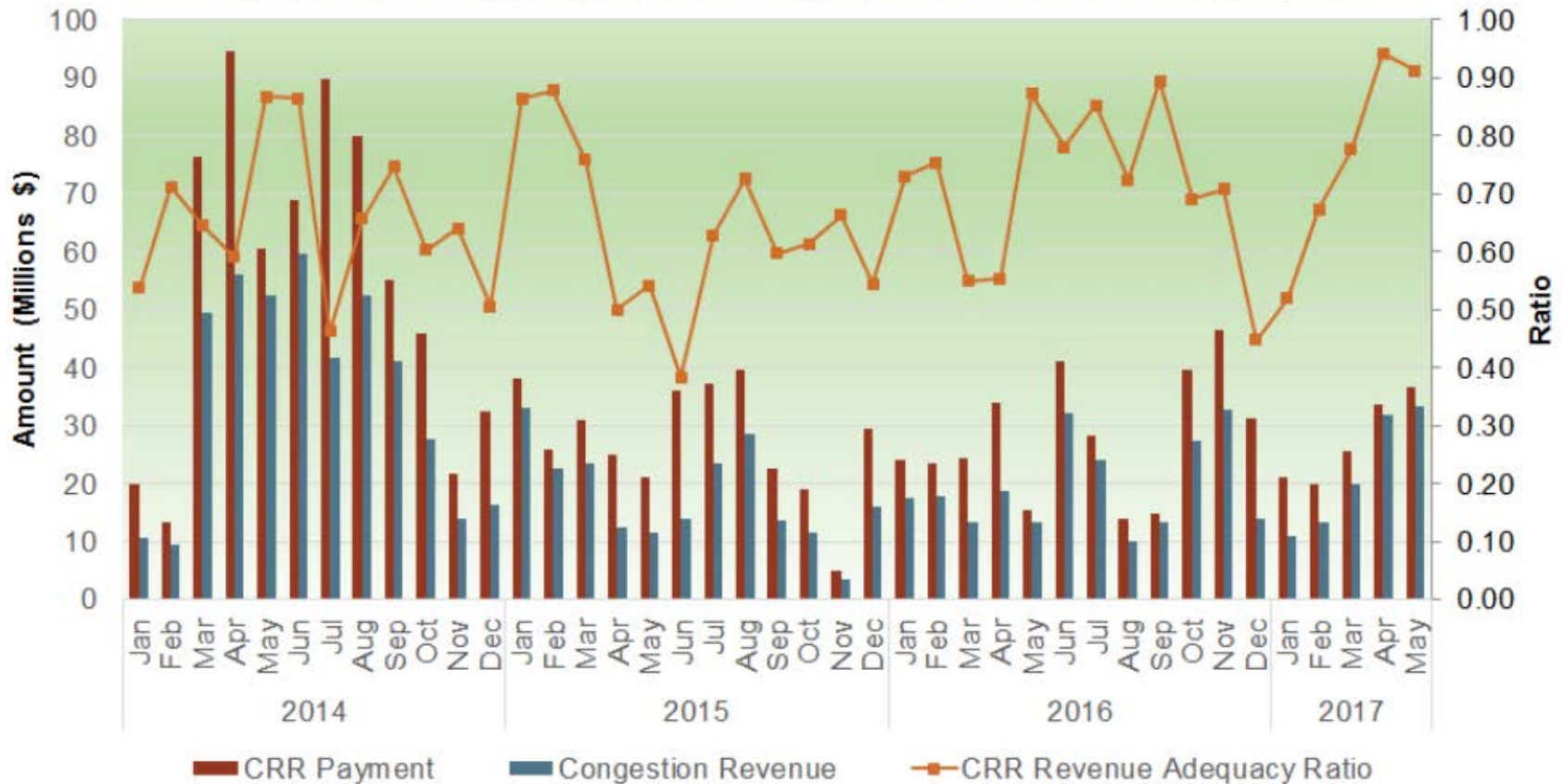
Figure 41: Monthly comparison of congestion rents incl. auction revenue with CRR entitlements



When Congestion Revenue + Auction Revenue < Total CRR Payments, measured demand pays for the shortfall

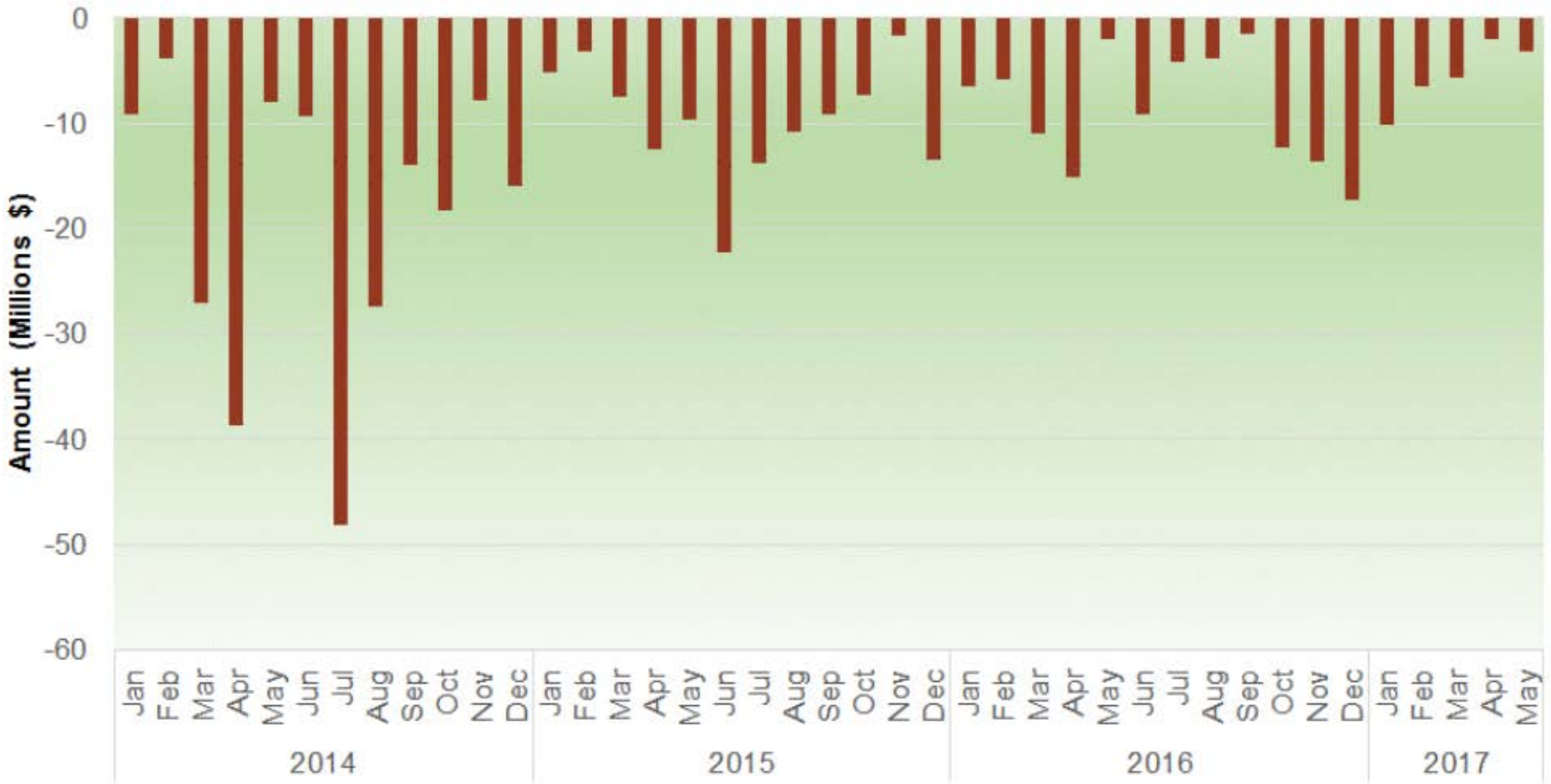
Propose to have all CRRs share in shortfalls between congestion revenue collected in day-ahead and CRR payments

Figure 39: Monthly comparison of congestion rents with CRR entitlements



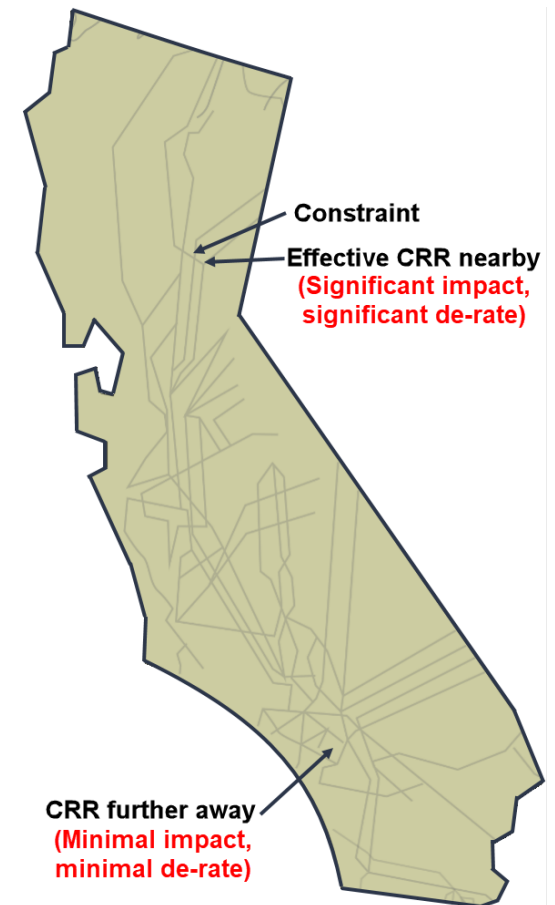
All CRR holders to share in approximately \$2M to \$20M per month in shortfalls

Figure 40: Monthly CRR revenue adequacy before auction revenues



Scaling CRR payments associated with day-ahead constraints that do not collect enough revenues achieves an equitable shortfall allocation

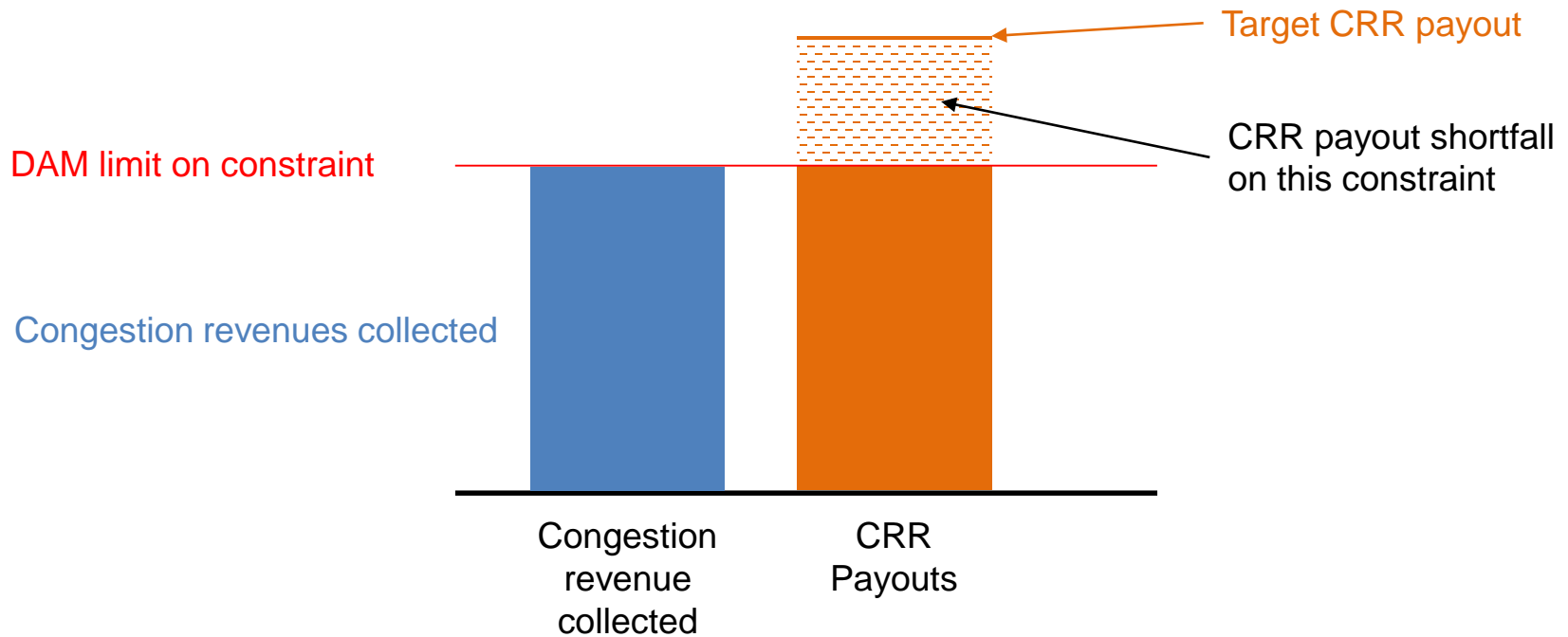
- Proposal essentially scales back CRRs that are no longer feasible in the day-ahead market
- Scaling is targeted to the hour and the constraint
- For instance, CRRs in southern California may have nothing to do with a constraint congestion shortfall in northern California, so they remain feasible



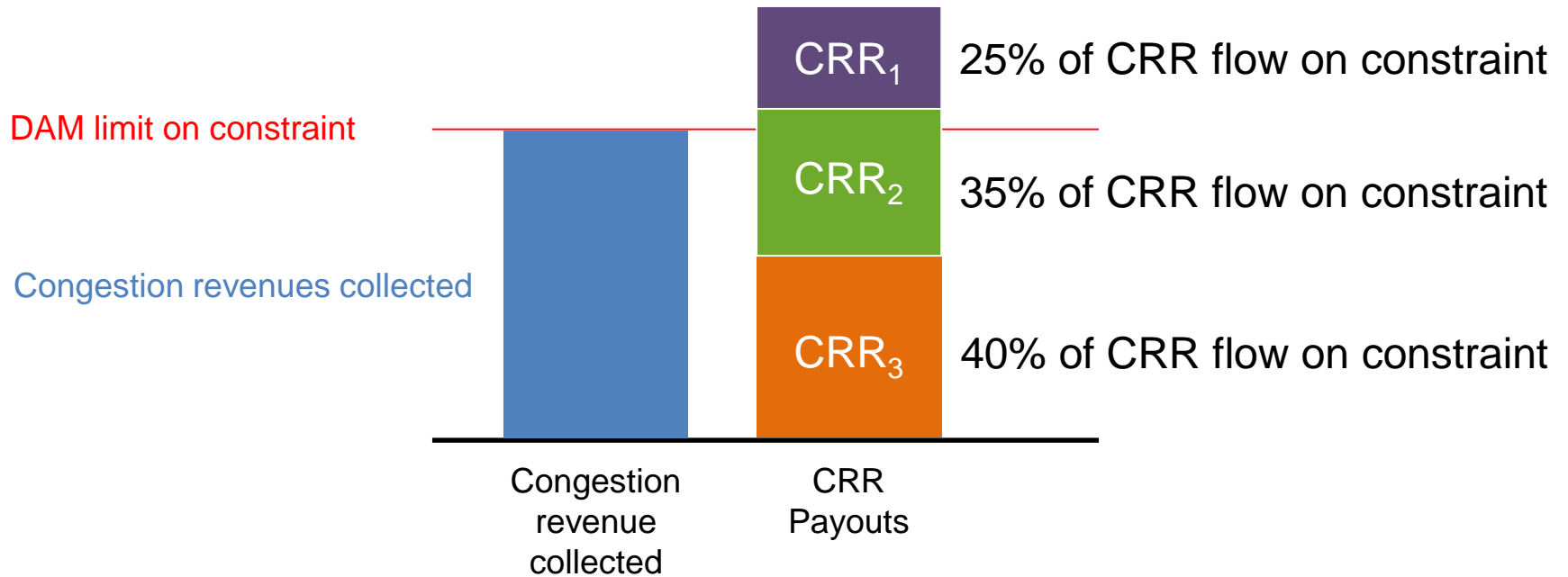
Scaling CRR payments associated with day-ahead constraints that do not collect enough revenues disincentivizes strategies to profit from model differences

- Where market participants may currently find it extremely profitable to bid for un-modeled constraints, payouts would be scaled back to only the portion which is found feasible in the day-ahead market
- The January 2017 crosstrip constraint generated \$6.48M of revenue inadequacy.
 - 59% of shortfalls allocated to auctioned CRRs would have been charged to CRRs purchased for less than \$0.10/MWh.

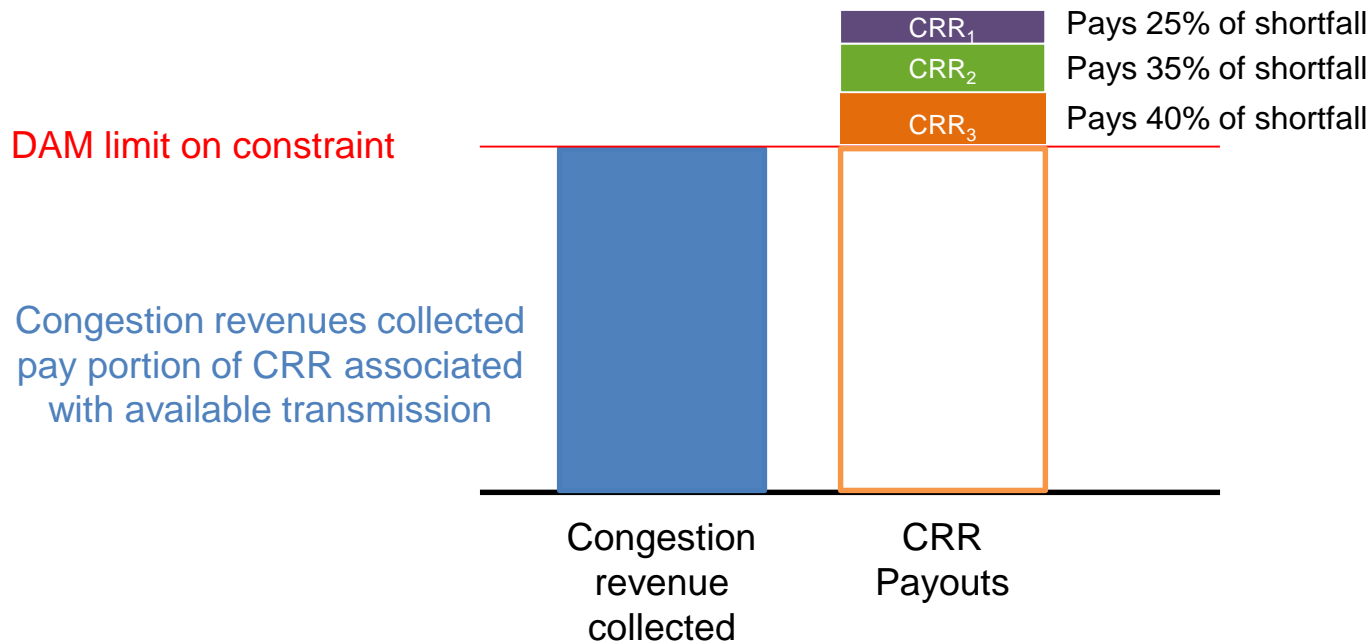
Proposal evaluates day-ahead constraints that do not collect enough revenues each hour



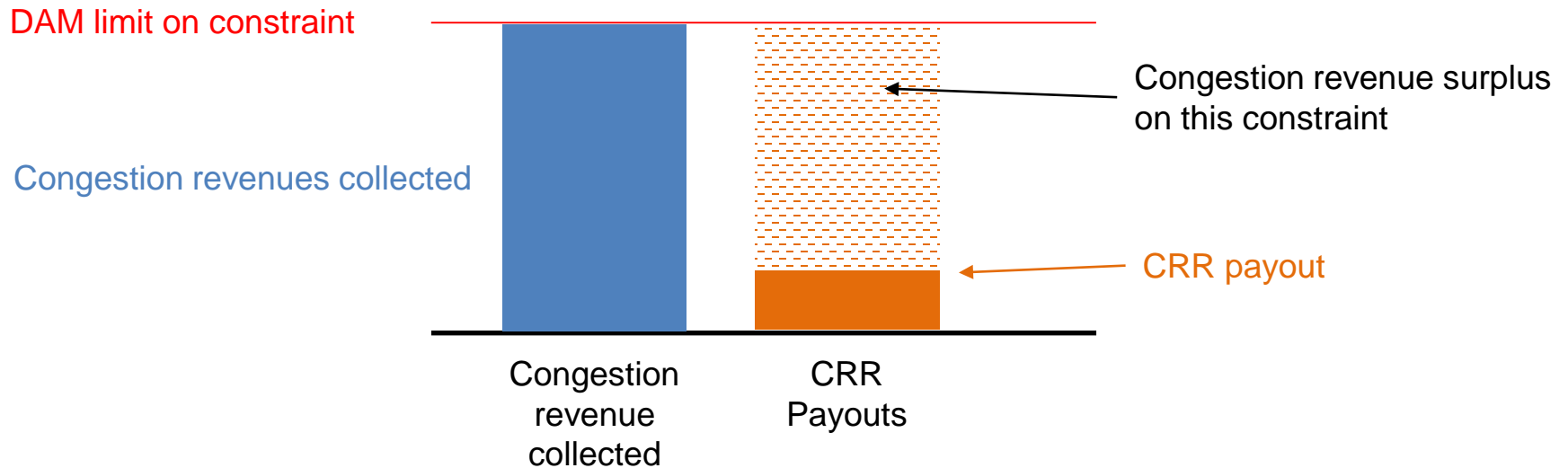
Proposal finds effective CRR flows on those constraints in that hour



Proposal scales back payment to those effective CRRs by allocating each CRR its portion of the shortfall



The day-ahead market will collect a surplus when day-ahead market settled flow is greater than congestion revenue rights settled flow on a constraint



Proposal allows surpluses on one constraint in one hour to offset shortfalls on the same constraint in other hours

- For example:
 - Allocate \$1,000 shortfall to CRR1 on a constraint in HE1
 - A \$750 surplus associated with CRR1 is collected on the same constraint in HE18
 - The final settlement for CRR1 will be a shortfall allocation of \$250
- Proposal does not mix surpluses across constraints
 - This would unravel the disincentive to strategically profit purely on modeling differences
- Proposal returns remaining surpluses at the end of the month to measured demand

Next Steps

Written stakeholder comments on today's discussion are due by COB May 31 to InitiativeComments@caiso.com.

Materials related to the CRR Auction Efficiency initiative are available on the ISO website at <http://www.caiso.com/informed/Pages/StakeholderProcesses/CongestionRevenueRightsAuctionEfficiency.aspx>