July 11, 2026

CAISO Board of Governors,

Subject: CRR Enhancements Phase 1 Proposal and the Importance of Addressing Loop Flows

Dear Board of Governors Members:

Appian Way appreciates the opportunity to provide comments to the CAISO Board of Governors regarding the CRR Enhancements policy initiative. Appian Way participates in the CAISO markets directly and also trades with counterparties in the broader western energy markets. Appian Way is also a member of the Energy Trading Institute, which advocates for open, transparent, competitive and fair electricity and related markets in the United States.

The ISO proposes here Tariff changes to explicitly authorize loop flow modeling in the annual CRR process. Appian Way supports these changes -- fundamentally, the CRR process' Simultaneous Feasibility Test (SFT) cannot fulfill its intended purpose without explicit modelling of loop flows.

However, "modelling" loop flows is one thing; establishing a "fair" allocation to transmission usage on CAISO's network is something else entirely, and it appears to be an issue that the CAISO has been avoiding even as non-CAISO participants' usage of CAISO's network has significantly expanded over the past several years.

It is quite likely that CAISO ratepayers will see a reduction in CRR allocation from improved loop flow modelling. These reduced CRR allocations may be appropriate. Or they may be a sign of a broader market design challenge at the intersection of the CRR Enhancements, EDAM Congestion Revenue Allocation (CRA) and Western Markets Seams policy initiatives.

There are two crucial questions that are not being addressed in the EDAM and CRR Enhancements processes. They are:

- How much transfer capacity on internal CAISO congested paths, particularly along Path 15, is being consumed by external entities; and how does this compare with previous historical usage from a different year?
- What is the fair allocation of usage of CAISO's transmission network between CAISO ratepayers vs. EDAM and Market+ participants based on historical usage, common sense and good utility practice?

We believe it is incumbent on CAISO staff to analyze the first question for CAISO stakeholders as important input in both the CRR Enhancements and EDAM policy initiatives. The attached short slide deck provides more detail on our perspective on this issue.

We look forward to continuing collaboration with CAISO staff and stakeholders on these important initiatives.

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Loop Flow Modelling in the CAISO CRR Market

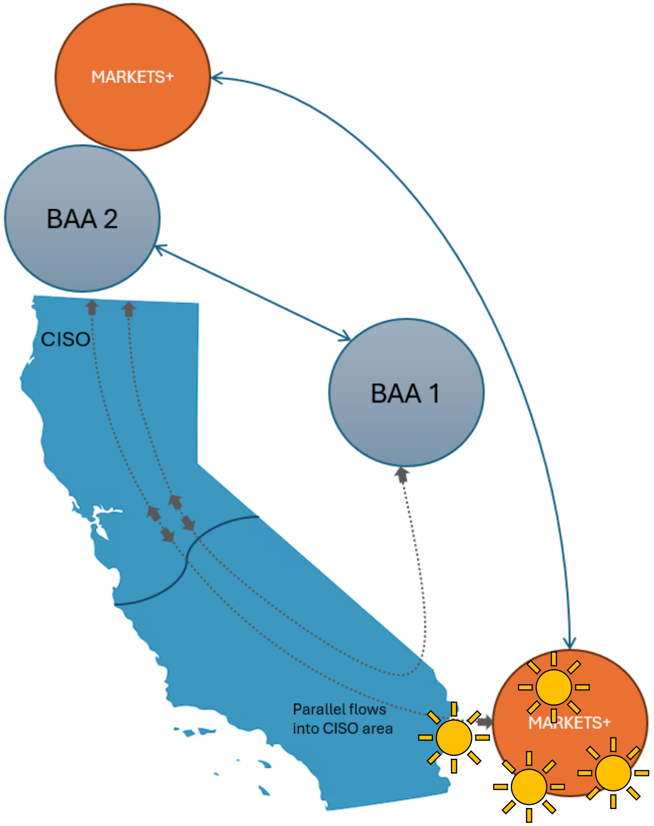
Abram Klein

16 July 2026

2026 CAISO Board of Governors Meeting

The Loop Flow Challenge in CAISO

- External south to north loop flows on CAISO Path 15 and related internal CAISO constraints have increased significantly over the past 5-7 years
- New resources and OATT contracts sourcing in the Desert Southwest flow 40% over CAISO's transmission network according to analysis by CAISO staff *
- These external loop flows are provided unlimited access to CAISO's grid and do not pay for the congestion they cause
- These external loop flows restrict CAISO ratepayers and market participants' ability to use the CAISO network through revenue inadequacy and reduced CRR allocation



*Market Performance and Advanced Analytics, Congestion Revenue Allocation – Stage 1 Analysis, December 11, 2025

Support for CAISO's CRR Enhancements Phase 1 Proposal

Improved Modelling of Loop Flows is Uncontroversial, but CAISO Must Wrestle with How Much Loop Flow Rate Payers Should Subsidize

- Fundamentally, the CRR process' Simultaneous Feasibility Test (SFT) cannot fulfill its intended purpose without explicit modelling of loop flows
- However, REALLY (and fairly) addressing the loop flow situation requires additional analysis and a business solution:
  - Additional analysis: How much transfer capacity on internal CAISO congested paths, particularly along Path 15, is being consumed by external entities; and how does this compare with previous historical usage from a different year (say 2019)? In cases where Path 15 transfer capacity is derated due to outages, how does the split change given that loop flows from external OATT rights are fully funded and subsidized by CAISO ratepayers?
  - Business solution: What is the fair allocation of usage of CAISO's transmission network between CAISO ratepayers vs. EDAM and Market+ participants based on historical usage, common sense and good utility practice? Is it 80/20? 60/40? Something else?
- This issue rests at the intersection of the CRR market design, EDAM CRA design and Western Markets SEAMs Coordination
  - We believe it is incumbent upon CAISO staff to perform the analysis described above as critical input for both the CRR Enhancements and EDAM Policy Initiatives. To date, CAISO has not prioritized educating stakeholders on this
  - To date the impact of external loop flows on CAISO ratepayers' ability to use the transmission network that they pay for may be vastly underappreciated
  - Left unaddressed, this issue will continue to worsen as more resources are developed in the Desert Southwest

Background:

- Appian Way presentation on Western Market Seams:
  - https://stakeholdercenter.caiso.com/InitiativeDocuments/Appian-Way-Presentation-Western-Market-Seams-Coordination-Apr-8-2026.pdf
- Appian Way (most recent) comments on EDAM CRA:
  - *https://stakeholdercenter.caiso.com/Comments/AllComments/ef1f7ce8-6802-401a-a302-32d3d6f2b606#org-3d96b686-be40-41c5-8ac8-872c155e40f4*