



California ISO

# DAME, EDAM, EDAM CAISO BAA PR Market Sim & Parallel Ops Meeting

April 20, 2025

ISO PUBLIC

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# Agenda

## Monday

- Scenario Walkthrough
- Market Validation and Analysis Overview
- Q&A

## Thursday

- Customer Experience Updates
- Parallel Operations Updates
- Market Validation and Analysis Overview
- Q&A

# DAME, EDAM, EDAM ISO BAA Meetings

Monday 9-10AM PT, and Thursday 1-2PM PT

	Monday	Tuesday	Wednesday	Thursday	Friday
April			1	2	3
	6	7	8	9	10
	13	14	15	16	17
	20	21	22	23	24
	27	28	29	30	
May					1
	4	5	6	7	8
	11	12	13	14	15
	18	19	20	21	22
	25	26	27	28	29

**Market Sim & Parallel Ops Meeting**

**ISO Closure**

**Cancelled**

[Calendar | California ISO](#)

# DAME / EDAM / WEIM – Timeline

Initiative	Connectivity Testing	Integration Testing	Structured Market Sim	Unstructured Market Sim	Parallel Operations	Activation
<a href="#"><u>Day-Ahead Market Enhancements</u></a>	06/02/25 – 09/01/25	06/02/25 – 09/01/25	09/02/25 – 12/01/25	12/01/25 – 01/30/26	02/02/26 – 04/30/26	05/01/26
<a href="#"><u>Extended Day-Ahead Market</u></a>	06/02/25 – 09/01/25	06/02/25 – 09/01/25	09/02/25 – 12/01/25	12/01/25 – 01/30/26	02/02/26 – 04/30/26	05/01/26
<a href="#"><u>EDAM ISO BAA Participation Rules Track A</u></a>	06/02/25 – 09/01/25	06/02/25 – 09/01/25	09/02/25 – 12/01/25	12/01/25 – 01/30/26	02/02/26 – 04/30/26	05/01/26
<a href="#"><u>Extended Day-Ahead Market On-Boarding - Pacificorp</u></a>	05/01/25 – 05/31/25	06/02/25 – 09/01/25	09/02/25 – 12/01/25	12/01/25 – 01/30/26	02/02/26 – 04/30/26	05/01/26
<a href="#"><u>Extended Day-Ahead Market - PGE</u></a>	11/01/25 – 11/30/25	12/01/25 – 03/01/26	03/01/26 – 05/30/26	03/01/26 – 05/30/26	06/01/26 – 09/15/26	10/01/26
<a href="#"><u>WEIM – Power Watch</u></a>	09/01/25 – 10/17/25	10/01/26 – 11/30/26	12/01/25 – 01/30/26	NA	02/16/26 – 04/30/26	05/06/26
<a href="#"><u>WEIM – Black Hills</u></a>	09/01/25 – 10/17/25	10/01/26 – 11/30/26	12/01/25 – 01/30/26	NA	02/16/26 – 04/30/26	05/06/26

Note: dates reflected here refer to the start and end dates around testing, specific Trade Dates relevant for testing and validations can be found in the [Settlements Calendar](#) posted to Release page on CAISO.com.

# Inquiry Stats

## General:

- 721 cases created since the start of Parallel Operations
  - 512 closed/resolved
- SC Participation continues to be strong
- Black Hills and Power Watch onboarding going well
- PacifiCorp onboarding going well – Phase 3 (Real-Time)
  - It is integral for participants to remain fully engaged in real-time operations **by submitting real-time economic bids.**
- Customer Meeting to be scheduled by CAISO next week to review Activation expectations, separate communication shall be sent out ahead of that meeting
  - Tentative: Thursday April 23rd

## Market Wide Update:

- Khaled Abdul-Rahman (VP, Chief Information and Technology Officer) participated in last Thursday's call and engaged in a substantive and valuable discussion with the broader stakeholder community. He addressed several key trending topics, including real-time congestion volatility, resource adequacy pricing, GHG price formation, IR and RC eligibility, the GHG must-offer obligation, and upcoming coverage of the ISO Production activation plan. We encourage participants that missed that call, to kindly go listen to the recording.

# MONA & CRAG

- Reminder: That the MONA and CRAG scheduling points will become EDAM Transfer locations between the CAISO and Pacificorp with the upcoming implementation of the Extended Day Ahead Market (EDAM), and will no longer support Export or Wheel transactions (as previously discussed during the [Extended Day-Ahead Market \(EDAM\) Initiative](#), specifically regarding the [ITIE implementation details](#)). As such, all **Export and Wheel** IDs currently registered in the CAISO Master File at MONA and CRAG will no longer be available **effective 4/17/2026 in the Stage environment and 5/1/2026 in the Production environment**.
- Effective with EDAM go-live, only **Import** transactions at MONA and CRAG that are associated with **Resource Adequacy (RA)** or **Renewable Portfolio Standard (RPS)** obligations **and have been registered directly with Pacificorp will be permitted**. These transactions must be coordinated by reaching out to Pacificorp at [EDAM\\_Questions@pacificorp.com](mailto:EDAM_Questions@pacificorp.com).
- Again, any transactions at MONA and CRAG that have not already been registered with Pacificorp will be end-dated effective 4/30/2026 23:59 in the Production environment.

# Parallel Operations Updates

- CAISO VP, Khaled Abdul-Rahman
  - High RTD GHG price observed on TD 4/10
  - Missing certain load bids during last weekend
  - Reasoning of current ETSRs setup on Parallel Operations and next week plan

# MSS-017

Scenario Number	Structured scenario			
17	Name	Transmission Rights Congestion Hedge Validation		
	Market	DAM		
	Description	<ul style="list-style-type: none"> <li>• CISO Binding Constraint</li> <li>• PAC OATT Transmission schedules MCC is impacted by the CISO BAA Constraint</li> <li>• PAC OATT Transmission CRN has a MF Hedge Flag set to 'Yes'</li> </ul>	EDAM BAA Impact	<b>CRR1B Settlement</b> EDAM Entity receives a OATT congestion Hedge for the CISO BAA Constraint Congestion
	Market Operator Actions	<ul style="list-style-type: none"> <li>• Based on resources/trade hours MP provides, Market Operator shall identify transmission elements in CISO BAA on which the resources (provided by EDAM MPs) have impact on and adjust limit as needed to trigger the transmission elements binding in IFM.</li> </ul> <p>Note: Market Operator may advise Market Participant to switch to use other resources if the provided resources are too remotely connected to CISO systems.</p>	CISO BAA Impact	CRR1B Settlement <ul style="list-style-type: none"> <li>• CRR Holders are paid based upon CISO Binding Constraint excluding OATT Financial Hedge Rights</li> <li>• CRR1B System excludes the EDAM OATT Congestion Hedge from Constraint level Congestion revenue distribution (paid out in settlements as defined above)</li> </ul>
	EDAM Market Participant Actions	<ul style="list-style-type: none"> <li>• Preregister OATT1/OATT1 contract in MF with hedge flag as Y</li> <li>• At TD-2D, Market Participant to inform Market Operator about the intended submissions of the resource names and trade hours with OATT1/OATT2 contract</li> <li>• Submit self-schedule under OATT1 or OATT2 transmission schedule within an EDAM BAA, Market Participant shall ensure the self schedule submitted is within contract limit and is balanced.</li> </ul> <p>Review DAM results and downstream settlement statements.</p>	Expected Outcome	Settlement properly applies congestion hedge treatment
			Expected Settlement Outcome	Charge Code: 8411, 8704 and 6011

# MSS-018

Scenario Number	Structured scenario	
18	Name	Congestion Hedge Validation
	Market	DAM
	Description	<ul style="list-style-type: none"> <li>CISO Binding Constraint</li> <li>PAC OATT Transmission schedules MCC is impacted by the CISO BAA Constraint</li> <li>PAC OATT Transmission CRN has a MF Hedge Flag set to 'Yes'</li> </ul>
	Market Operator Actions	<ul style="list-style-type: none"> <li>Based on resources/trade hours MP provides, Market Operator shall identify transmission elements in CISO BAA on which the resources (provided by EDAM MPs) have impact on and adjust limit as needed to trigger the transmission elements binding in IFM.</li> </ul> <p>Note: Market Operator may advise Market Participant to switch to use other resources if the provided resources are too remotely connected to CISO systems.</p>

EDAM Market Participant Actions	<ul style="list-style-type: none"> <li>Preregister OATT1/OATT1 contract in MF with hedge flag as Y</li> <li>At TD-2D, Market Participant to inform Market Operator about the intended submissions of the resource names and trade hours with OATT1/OATT2 contract</li> <li>Submit self-schedule under OATT1 or OATT2 transmission schedule within an EDAM BAA, Market Participant shall ensure the self schedule submitted is within contract limit and is balanced.</li> </ul> <p>Review DAM results and downstream settlement statements.</p>
EDAM BAA Impact	<p><b>CRR1B Settlement</b></p> <ul style="list-style-type: none"> <li>EDAM Entity receives the TOR/ETC Congestion hedge settlement for Balanced CRNs</li> </ul>
CISO BAA Impact	<p><b>CRR1B Settlement</b></p> <ul style="list-style-type: none"> <li>CRR Holders are paid based upon CISO Binding Constraint excluding OATT Financial Hedge Rights</li> <li>CRR1B System excludes the EDAM OATT Congestion Hedge from Constraint level Congestion revenue distribution (paid out in settlements as defined above)</li> </ul>
Expected Outcome	Settlement properly applies congestion hedge treatment
Expected Settlement Outcome	Charge Code: 6700, 6790, 8704

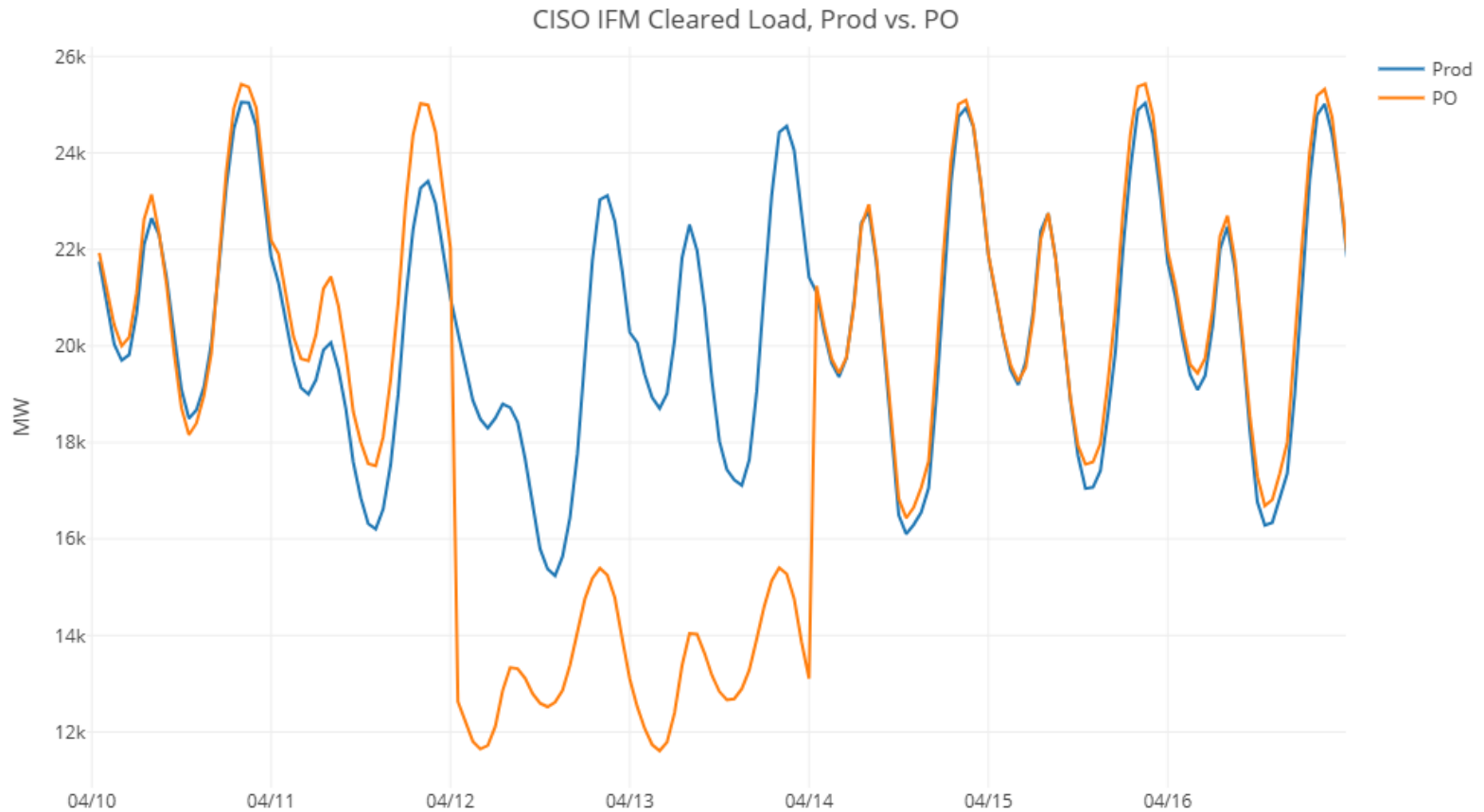
## Extreme RUC pricing on 4/6

- On 4/6, a market issue caused extreme congestion pricing in RUC that drove \$1 million + pricing for SCE in RUC
- The cause of the issue has been identified, and a fix has already been put in place
- This type of issue would normally be caught and fixed before publishing the results. It was missed due the market run occurring on the weekend in the PO environment

# Change to RUC envelope constraint multiplier will be activated for tomorrow's trade date

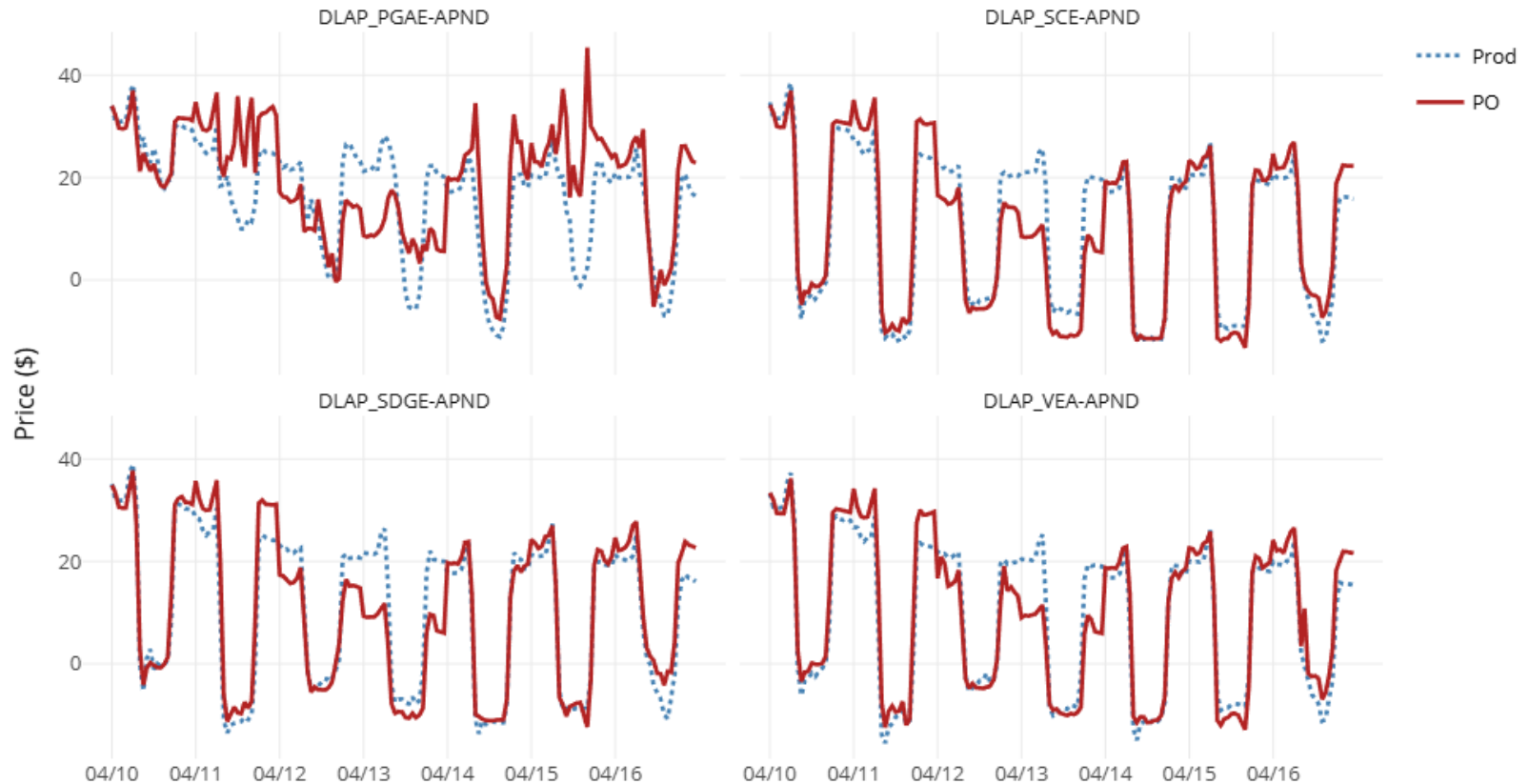
- The envelope constraint multiplier in RUC determines the impact of RCU and RCD awards on battery SOC
  - This is a separate parameter from the one used in IFM for Imbalance Reserve, but it operates in the same way for Reliability Capacity
- So far in PO, the RC value has been set to match IR multiplier
- Starting 4/17, the RC Envelope Constraint Multiplier will be set to 100%

# CISO Demand Bid issues for 4/12 and 4/13



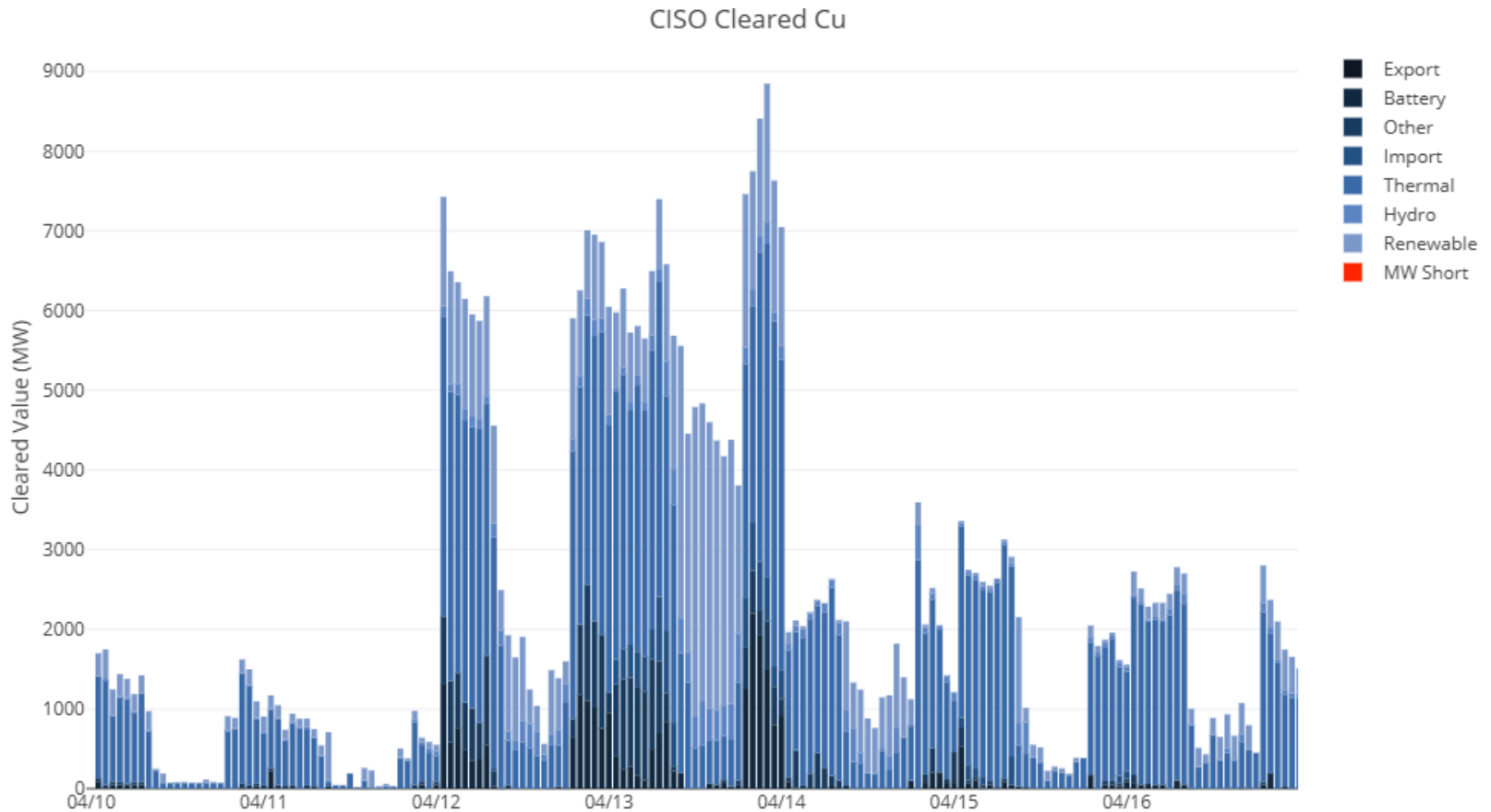
A SIBR issue prevented a significant amount of demand bids from reaching the market on 4/12 and 4/13 for CISO

# IFM PO vs. Production DLAP prices

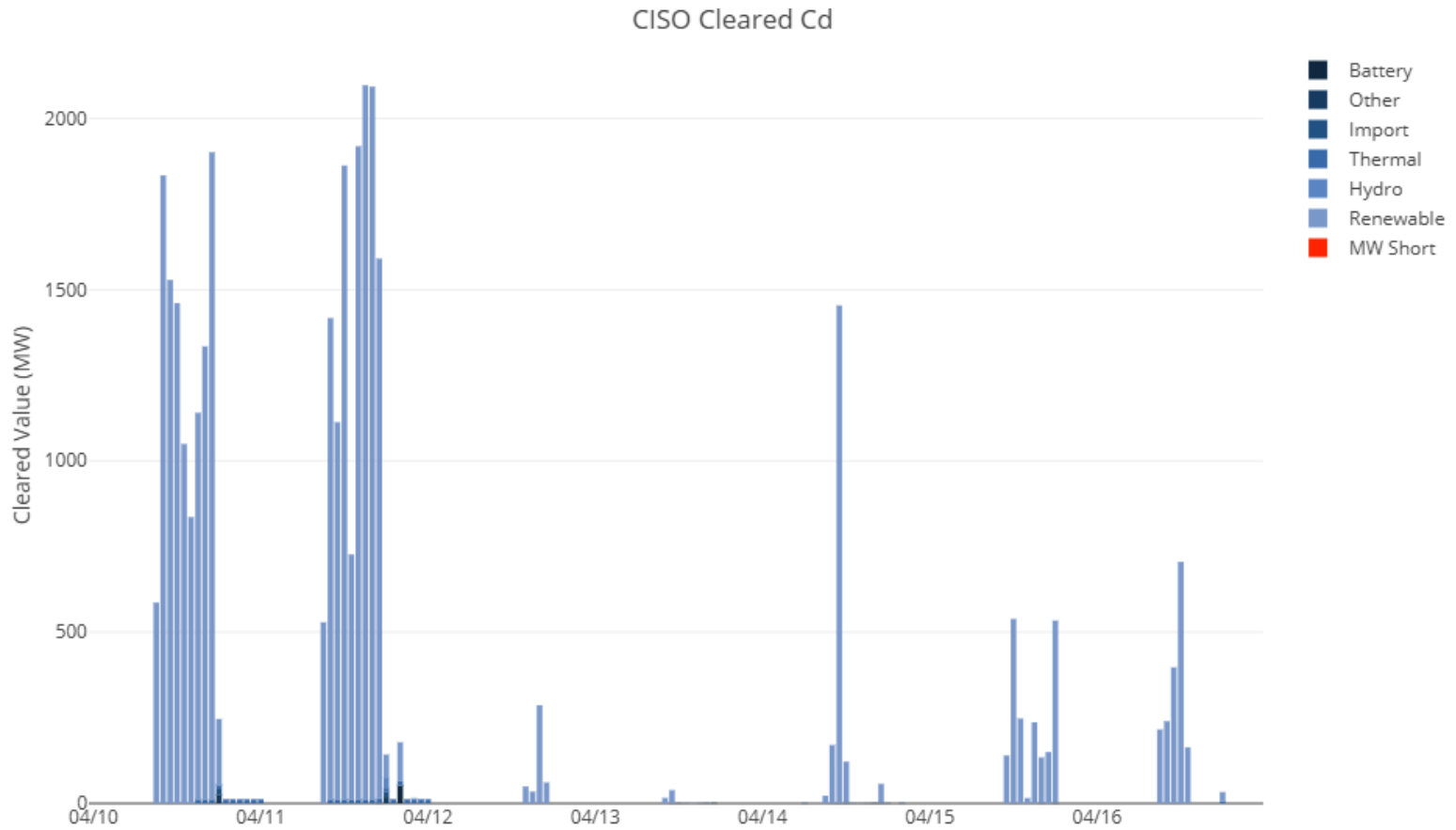


The loss of demand bids on 4/12 and 4/13 saw lower PO prices than production

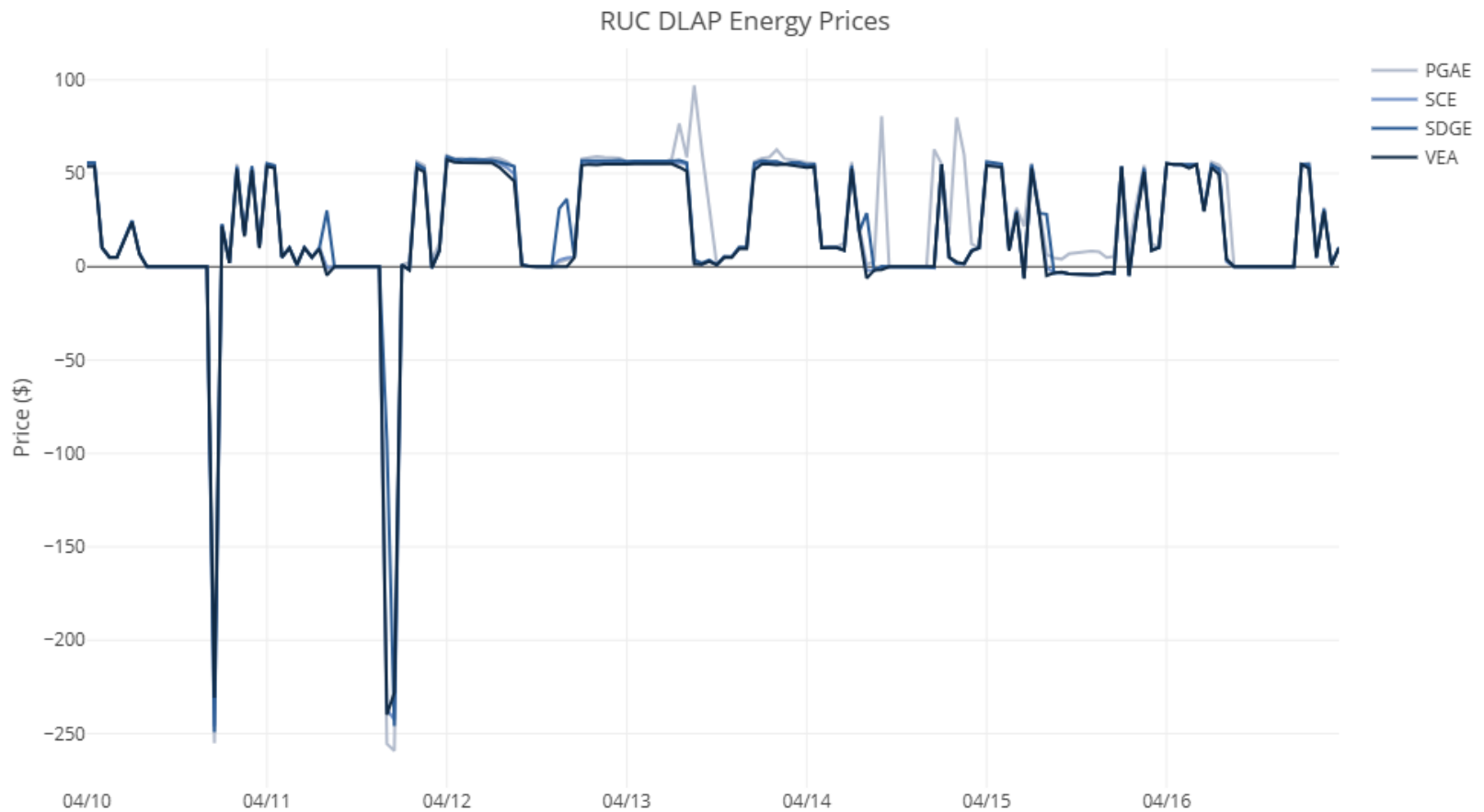
# Low IFM procurement led to large amount of RCU procurement



# CISO RCD Procurement

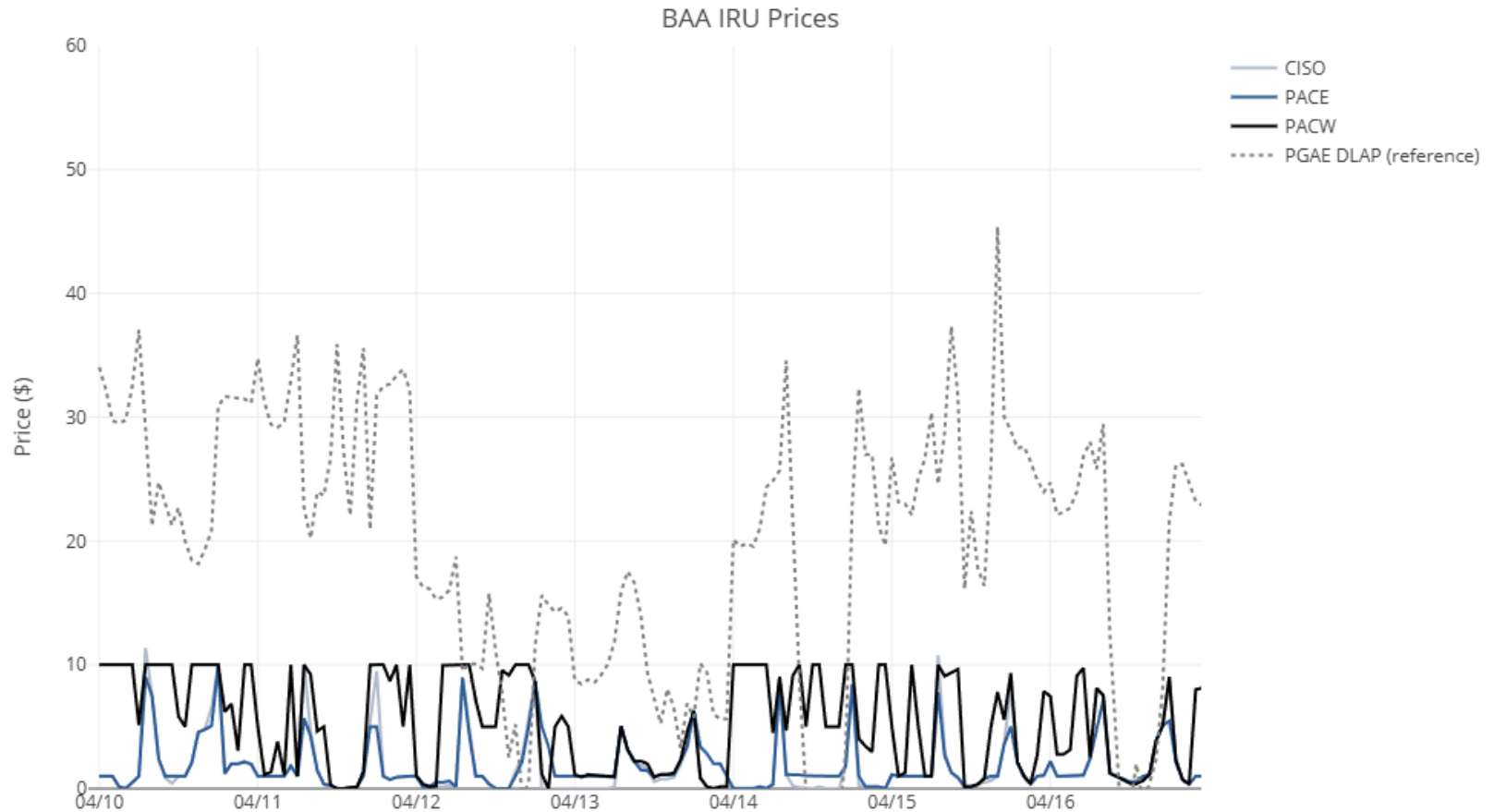


# CISO RUC DLAP prices

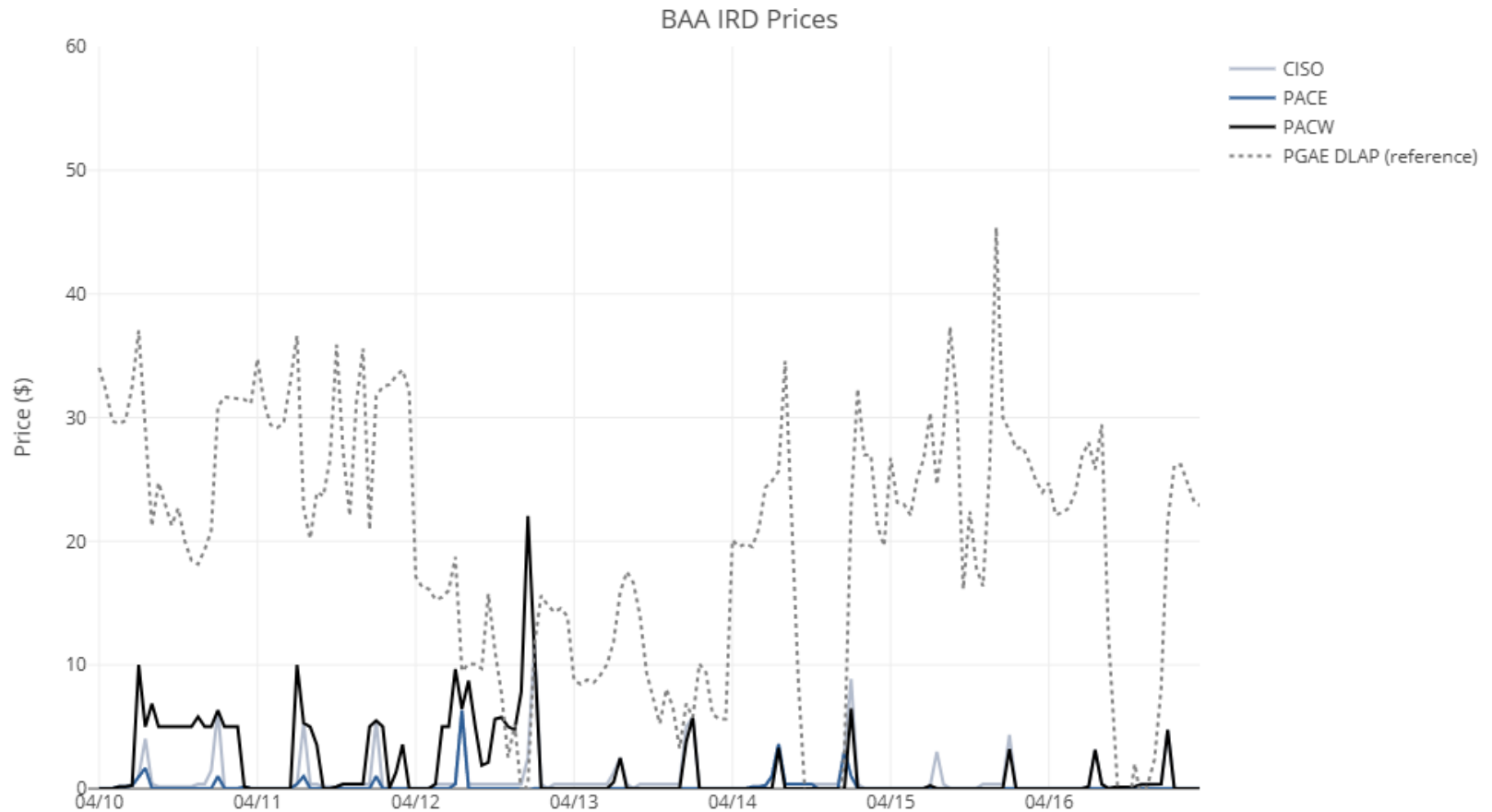


- Positive price reflects RCU price, negative price reflects RCD price
- High RCD prices on 4/11 and 4/12 set by high RCD bids

# BAA level IRU prices – week of 4/16



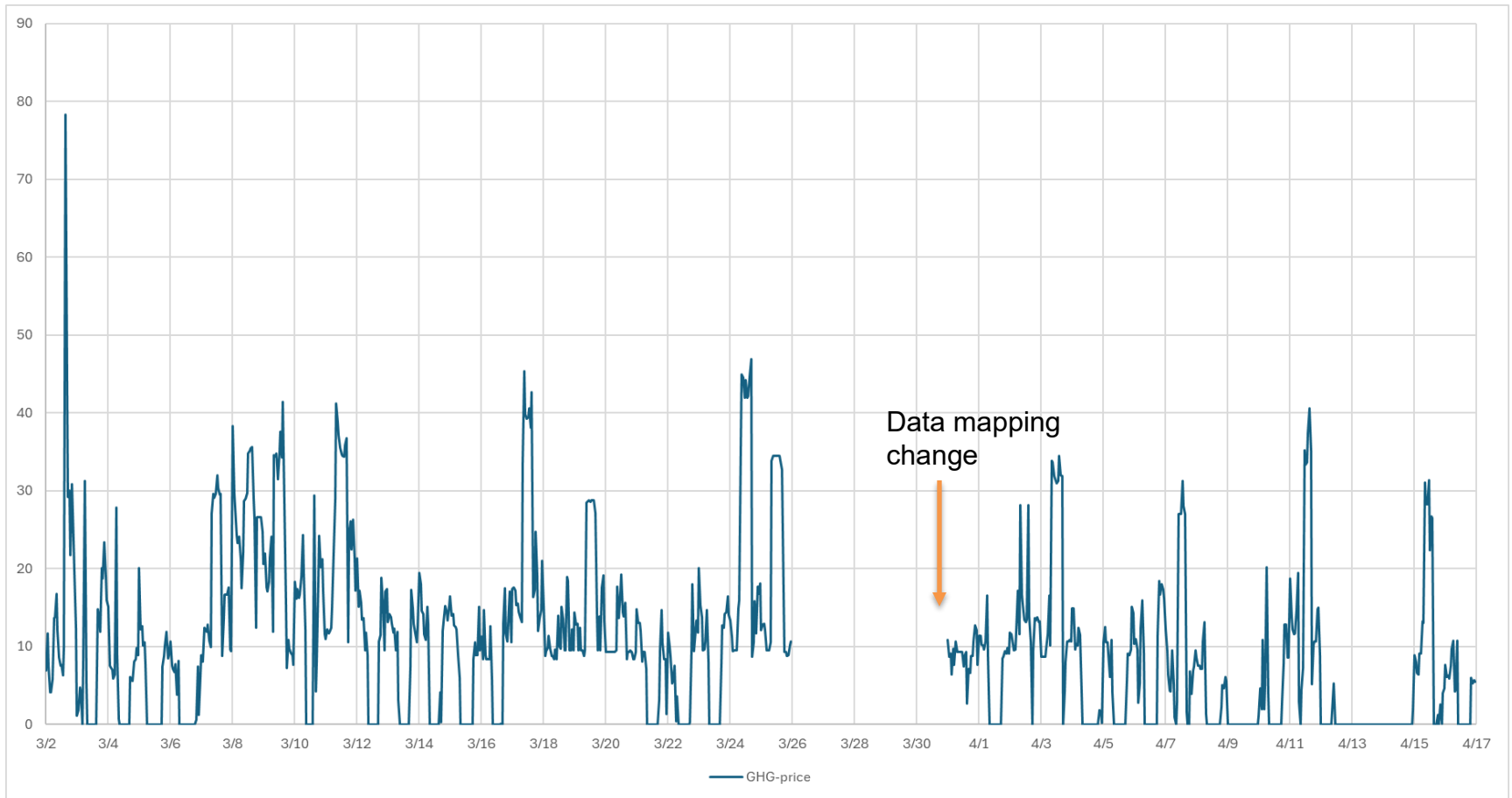
# BAA level IRD prices – week of 4/16



# CISO Net Export Constraint and RUC adjustments

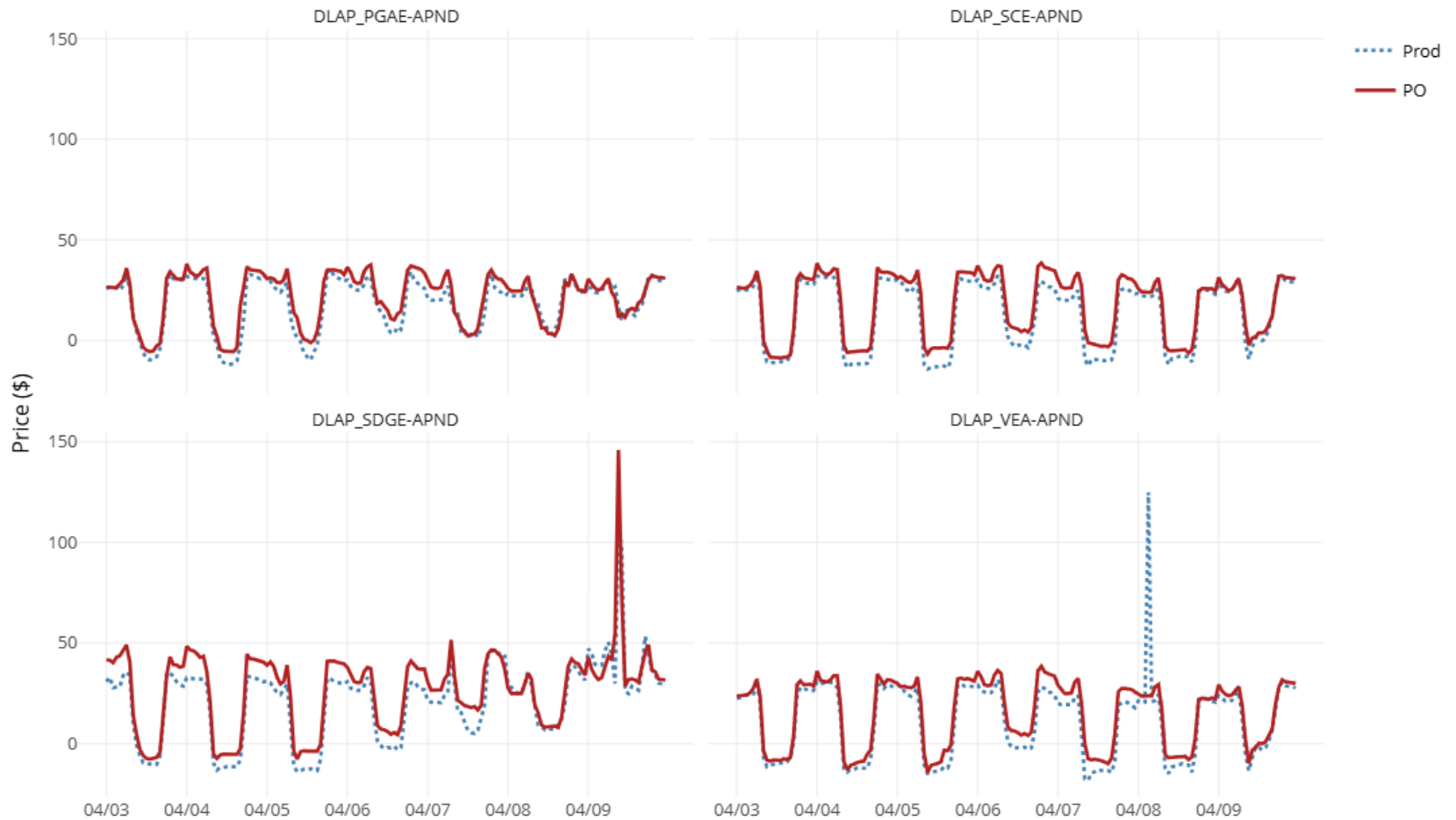
- For more information on CISO Net Export Constraint see PRR 1664
  - Confidence factor to be set at 0%
  - Reliability margin to be tuned based on conditions (stressed or non-stressed hours)
- For more information on EDAM BAA RUC adjustments see EDAM BPM, PRR 1665, Section 22.4.1
  - Like all other EDAM entities, CISO will have a matrix specifying the details of the adjustment

# PO IFM GHG prices

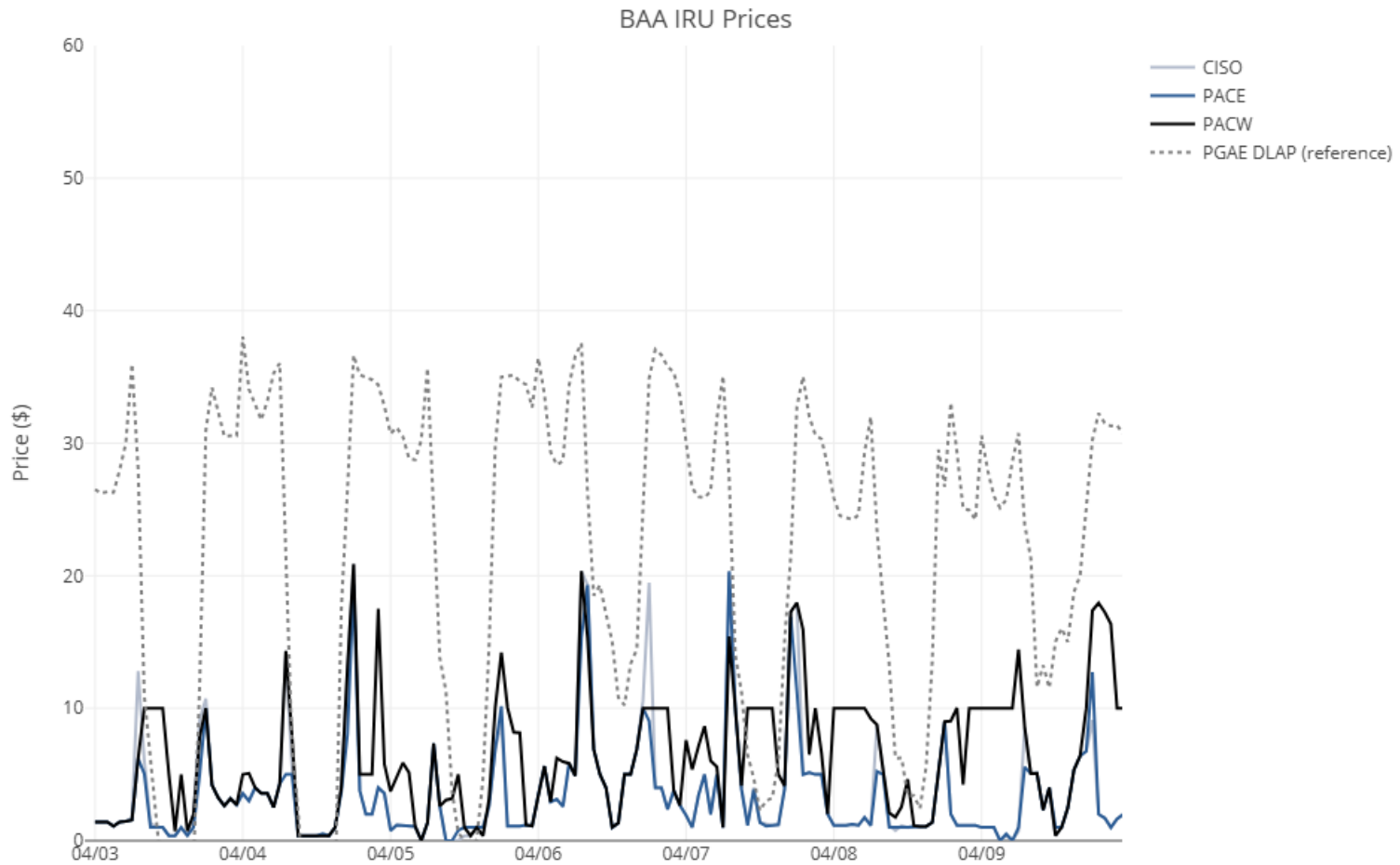


# DATA FROM 4/9 CALL

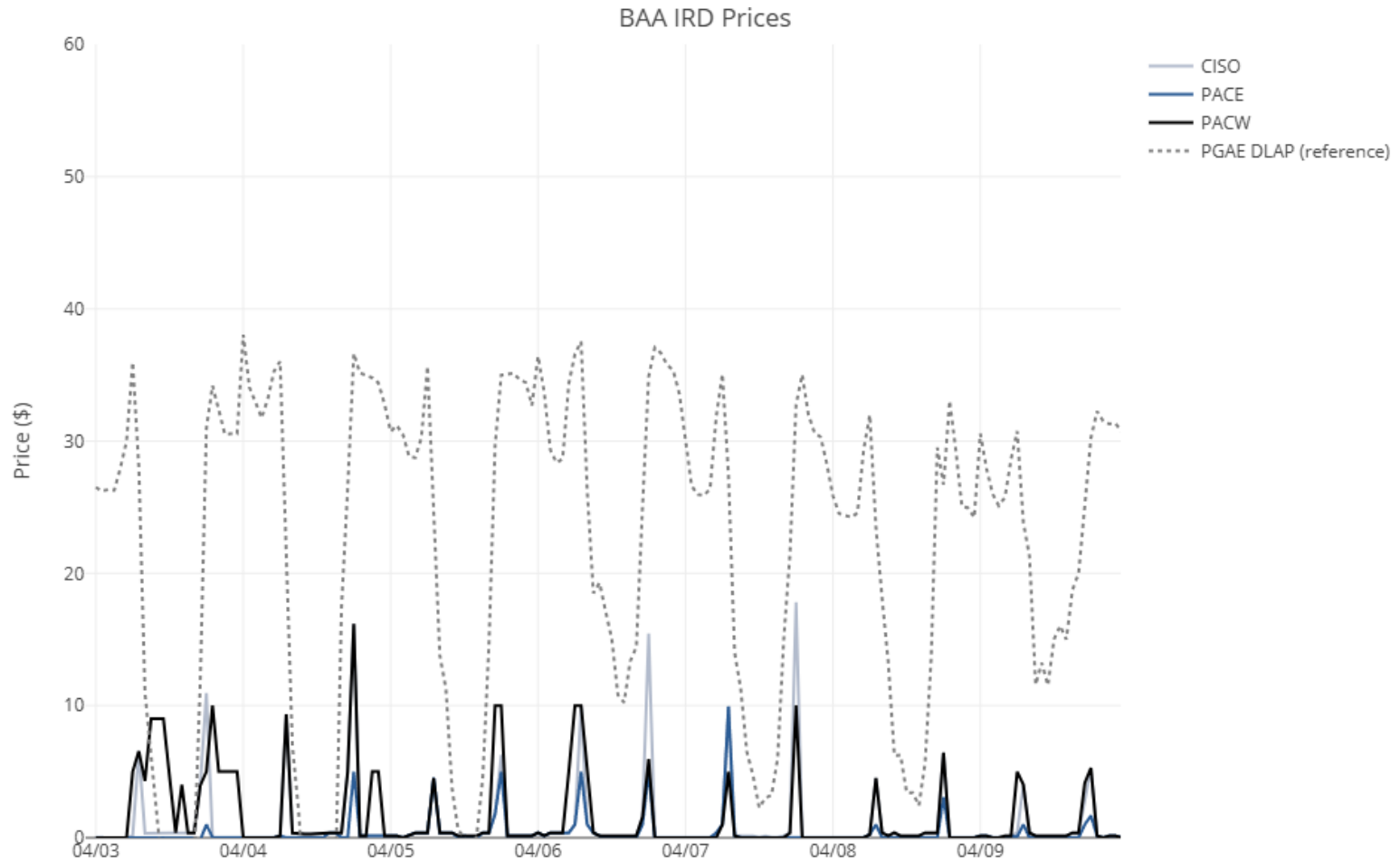
# IFM DLAP price comparison, PO vs. production



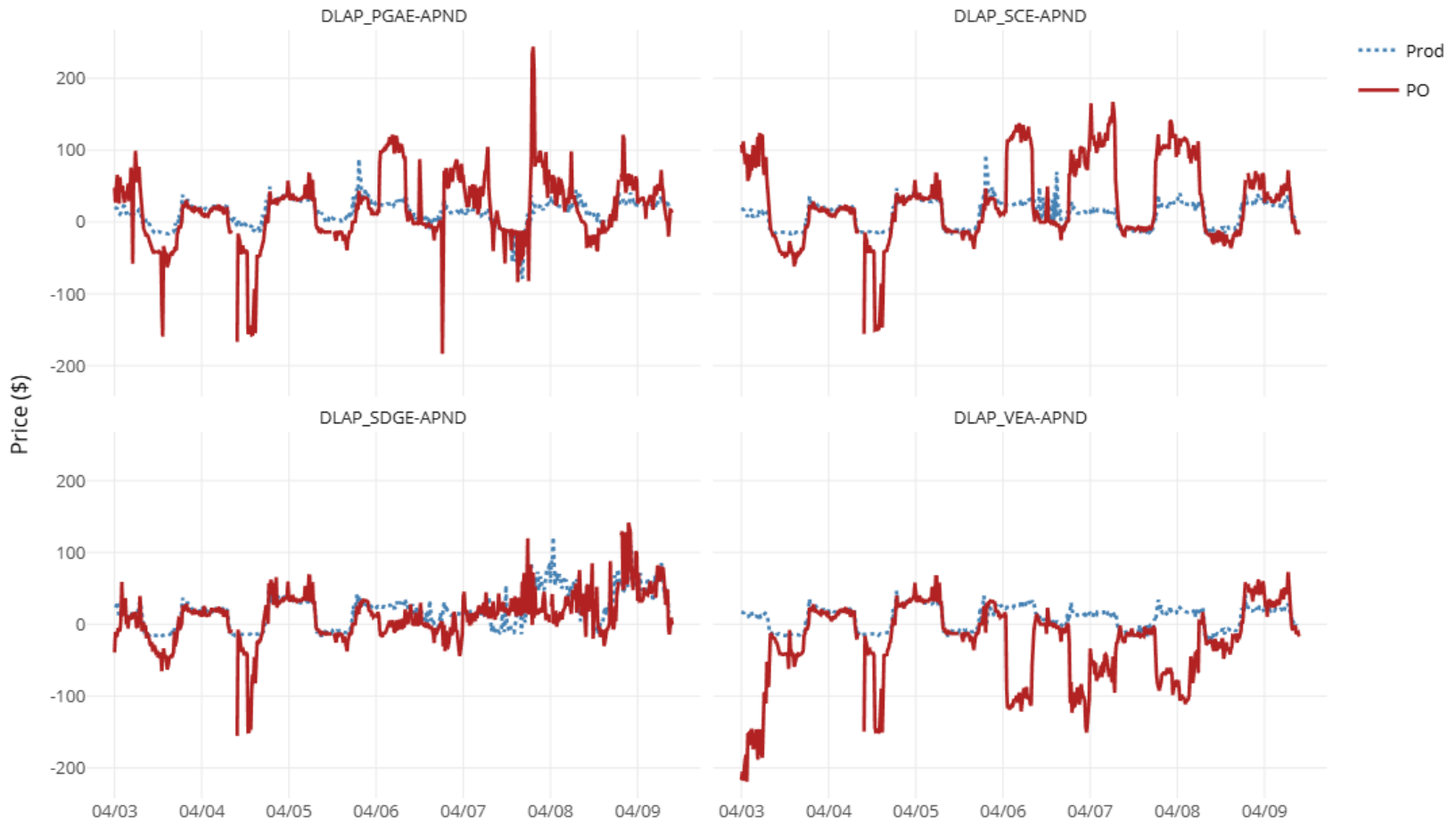
# BAA level IRU prices – week of 4/9



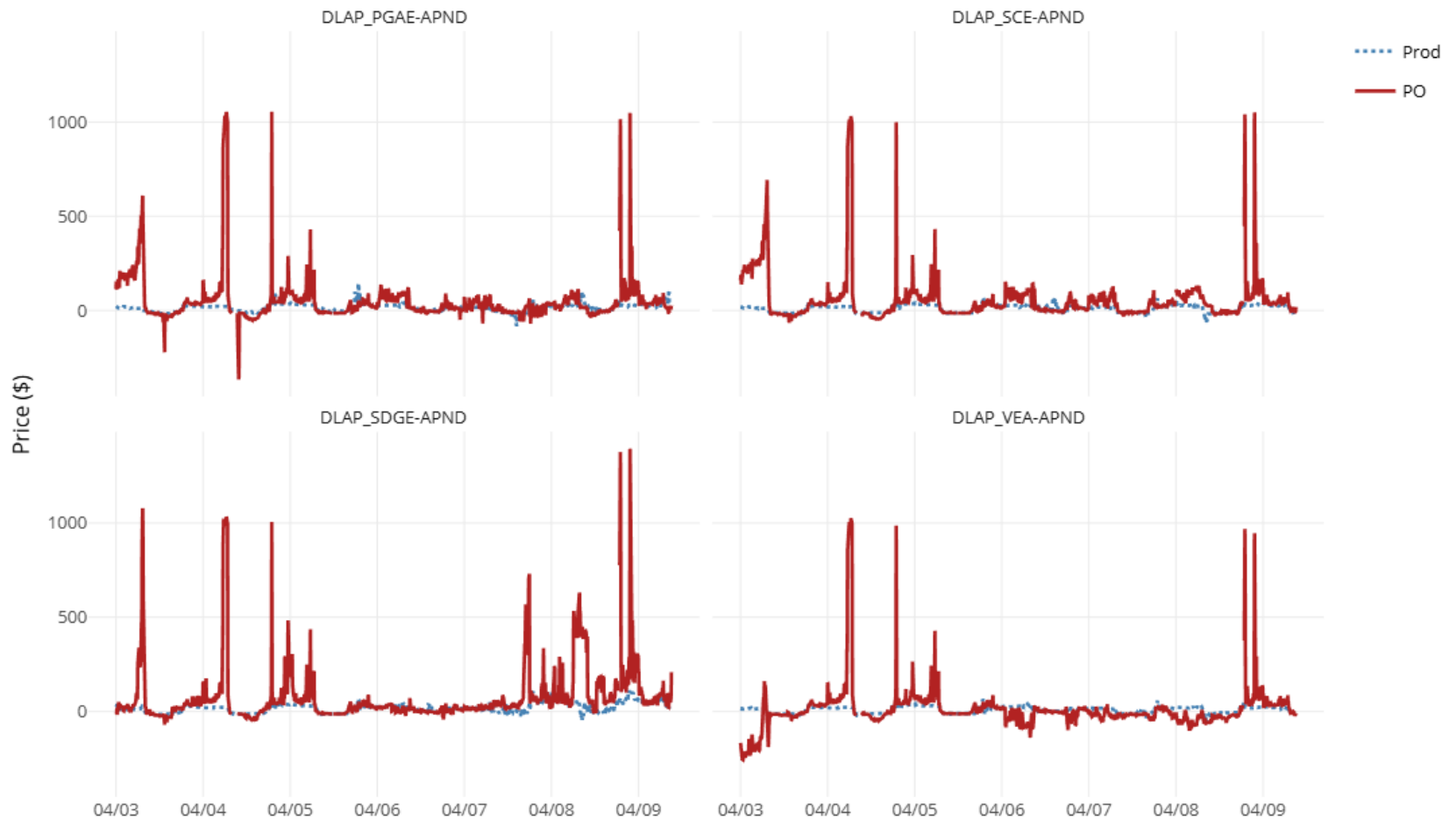
# BAA level IRD prices



# RTPD DLAP price comparison, PO vs. production



# RTD DLAP price comparison, PO vs. production



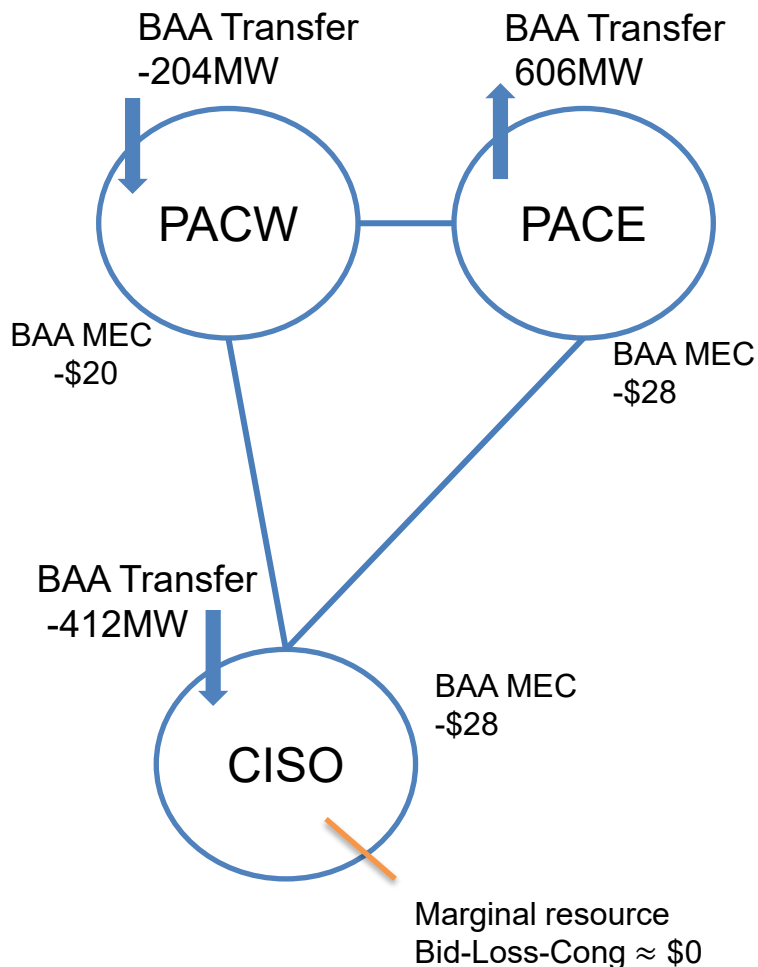
# ISO General Perspective on Parallel Operations

- CAISO VP, Khaled Abdul-Rahman
  - Real-time congestion volatility
  - Resource adequacy pricing
  - GHG price formation
  - IR and RC eligibility
  - GHG must-offer obligation
  - Upcoming coverage of the ISO Production activation plan

Note: Refer to 4/9/26 recording for thorough overview.

# New GHG example 1.

## GHG price set by the marginal bid

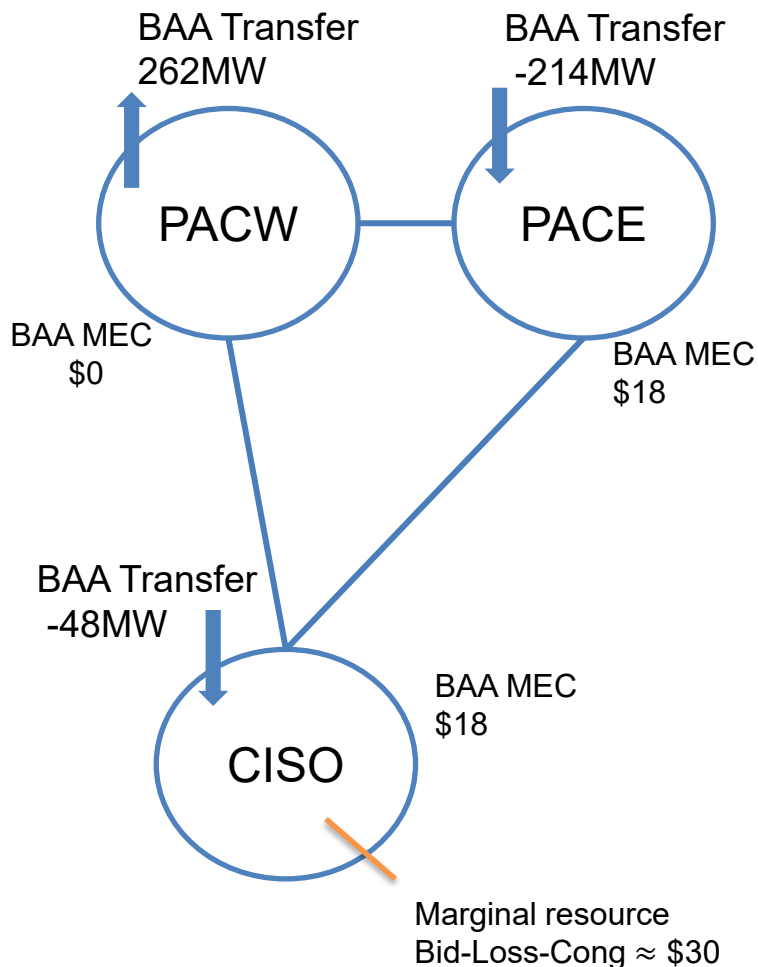


April 7<sup>th</sup>, HE15

- GHG allocation
  - 412MW to PACE resources
  - Marginal GHG bid @\$28
- Within CISO
  - BAA MEC: -\$28
    - Same as PACE with transfer open
  - Cost inside CISO BAA/GHG area ≈ \$0
  - GHG price set by the bid
 
$$0 - (-28) = 28$$

# New GHG example 2.

## GHG price not set by the bid



April 7<sup>th</sup>, HE6

- GHG allocation hit resource limit 48MW
- CISO BAA transfer the same as GHG transfer
- Within CISO
  - BAA MEC: \$18
    - Same as PACE with transfer open
  - Cost inside CISO BAA/GHG area ≈ \$30
  - GHG price
    - $30 - 18 = 12$

# CISO Net Export Constraint and RUC adjustments

- For more information on CISO Net Export Constraint see PRR 1664
  - Confidence factor to be set at 0%
  - Reliability margin to be tuned based on conditions (stressed or non-stressed hours)
- For more information on EDAM BAA RUC adjustments see PRR 1665

# Updated GHG Market Solution

Why is GHG Market Solution being updated?

- the current GHG model distinguishes between ISO balancing area and California GHG regulation area.
- Due to this setup data quality issues caused high prices during Parallel Operations. These were largely corrected but some high prices persist due to area definitions. To ensure a smooth activation, CAISO is aligning GHG regulation area with the balancing area.

Updated GHG Market Solution as of 4/1/26

- CAISO Greenhouse Gas (GHG) market solution updated to align the GHG regulation area with the balancing area to simplify market interactions and avoid unintended consequences at go-live.

When will GHG boundary definitions be updated to reflect GHG market solution by individual BAAs (or other granular approach)?

- CAISO will have market participant planning (MPM) forum to ensure stakeholder input and visibility.

# MSS-016

Scenario Number	Structured scenario	
16	Name	DA RA Obligation Reassignment
	Market	DAM
	Description	Demonstrate Reassignment of RA Obligation
	Market Operator Actions	N/A
	EDAM Market Participant Actions	<ul style="list-style-type: none"> <li>• RA suppliers define SR (for Generic RA) and TGs (for Flex and Generic RA) in MF to support month-ahead RA showings for RA imports</li> <li>• RA supplier SC submits RA obligation reassignments in CIRA by 8 am for DA to ensure obligation transfer functions and RAAIM settlements are correctly assessed               <ul style="list-style-type: none"> <li>○ For RA sourced from EDAM BAA: submit RA obligation reassignment to physical resources by 8 am</li> <li>○ DA reassignment carries over to RT</li> </ul> </li> <li>• SC submits (in SIBR) DA bids on resources/SRs with DA RA obligation</li> <li>• SC submits (in SIBR) RT bids on resources with RT RA obligation</li> </ul>
	Expected Outcome	SIBR UI/API: Validate submissions  CIRA UI: <ul style="list-style-type: none"> <li>• New DAME/EDAM Tab (being added)</li> </ul> CMRI: <ul style="list-style-type: none"> <li>• N/A for directly assessing RA reassignment</li> </ul> OASIS: <ul style="list-style-type: none"> <li>• N/A N/A for directly assessing RA reassignment</li> </ul>
	Anticipated Settlement Outcome	Settlements to assess RAAIM based on RA obligation reassignment and bid submission status

# Testing Request to Community

## What

- The Siemens Architecture Framework (SAF) has been upgraded in the Market-Sim (MAPSTAGE) environment

## Ask

- The ISO request externals, particularly those using **lower-version B2B services** (e.g., submitRawBidSet\_v3, v4), to begin submitting, retrieving, and validating services
- Please report any issues or anomalies observed during this validation via CIDI

## Why

- Early validation with older B2B service versions helps rule out SAF-related issues
- This ensures readiness ahead of the planned SAF cutover, which is targeted **prior to EDAM go-live**
  - **Expected date to be communicated**
- Proactive testing supports a smoother transition and minimizes risk during EDAM-related activities

# Parallel Operations Phases

- **Phase 1:** DA with transfer off, timeline of 2 weeks or till goals are met, with the following goals
  - Focus on the completeness of data by all participants
  - Review Market quality output as compared to production energy profile plan
  - Market review quality and review of results
  - EDAM entity to adjust Type 2 and Type 4 submissions to limit transfers
  - Though the RTM is not the focus, it will run continuously to support settlements. The RTM should generally solve 95% of the intervals (~15 failed RTM intervals).
    - Market post processing (MQS, filling, price cleanup, etc.) runs on Settlement TDs.
- **Phase 2:** DA with transfer on, timeline of 2 weeks or till goals are met, with the following goals:
  - Focus on Market review quality and review of results of DA output.
- **Phase 3 (TD 3/18):** DA transfer with RT, timeline remaining time of PO, with the following goals:
  - Focus on Market review quality and review with focus on DA/RT convergence.
  - Define “cutover dry run” concepts to test as we enter Phase 3

## Parallel Operations – Phase 3

- Parallel Operations has officially entered **Phase 3**. We want to thank you again for your engagement and collaboration to date—your continued participation has been instrumental to reaching this milestone!
- With the transition to Phase 3, EDAM results will now flow into the **real-time** markets. As such, it is integral for participants to remain fully engaged in real-time operations by **submitting real-time economic bids**. Doing so **ensures sufficient system flexibility** and supports the fulfillment of associated DAME product obligations, and **ensures the real-time market results** being **produced reflect economic pricing** and are both production-like and operationally feasible.
- **Your active participation during this phase is critical** to validating market performance, identifying potential issues, and maintaining operational reliability as we progress. We greatly appreciate the time, expertise, and commitment you continue to dedicate to Parallel Operations.
- We look forward to your ongoing collaboration as we move through Phase 3 and continue toward a successful transition.

# Access Charge Guidance

## **Parallel Operations:**

- EDAM TSPs and CISO PTOs may submit an optional authorized affidavit with Attachment F for Parallel Operations participation by January 23, 2026.
- If not able to submit by January 23<sup>rd</sup>, submission from MAPSTAGE shall be utilized.
- EDAM Access Charge Rates and recoverable revenue information will be processed and posted by February 1<sup>st</sup> 2026 and be included in subsequent Parallel Operations Settlements Statements.

## **Production:**

- Unless submitted for Parallel Operations, EDAM TSPs and CISO PTOs must submit the authorized affidavit with Attachment F for Production by April 13<sup>th</sup>, 2026.
- EDAM Access Charge Rates and Recoverable revenue information will be processed and posted by April 27, 2026, and be included in statements published for TD 5/2 and onward.

# EDAM Participant Training Courses

## SIBR Training Courses

### March 10: **SIBR Fundamentals**

- This training will explore the core interface, walk through submitting and validating Energy and AS bids, and review the resulting outputs.
- Target Audience: SIBR users
- Registration Link: <https://caiso.regfox.com/scheduling-infrastructure-and-business-rules-sibr-fundamentals>

### March 19: **SIBR Advanced Bid Submission & Validation**

- This training provides walk through complex bid-submission scenarios—including TSR Types 1–4, transient TSRs, contract reference numbers, and transfer capacity limits—and show how to resolve common errors step-by-step
- Target Audience: SIBR users
- Registration Link: <https://caiso.regfox.com/training-scheduling-infrastructure-and-business-rules-sibr-advanced-bid-submission--validation->

## SIBR Training Materials

Visit the [Western Energy Markets](#) page on the ISO Training Center:

- EDAM Scheduling Infrastructure Business Rules (SIBR) Training presentation & video
- [Transient Transfer System Resource Bid Submission in Scheduling Infrastructure Business Rules \(SIBR\)](#)

# Training Courses: Process for Submitting Bids / Schedules in SIBR

To find basic information on bids and base schedules, view the following resources:

- Computer-based training courses:
  - [Economic Bids and Self Schedules](#)
  - [EDAM Bidding Basic Concepts](#)
- Instructor led training presentations and recordings:
  - [EDAM Scheduling Infrastructure Business Rules \(SIBR\) Training presentation](#)
  - [EDAM Scheduling Infrastructure Business Rules \(SIBR\) Training video](#)
  - [Transient Transfer System Resource Bid Submission in Scheduling Infrastructure Business Rules \(SIBR\) Presentation](#)
  - [EDAM Bidding Intermediate – presentation](#)
  - [EDAM Scheduling Coordinator Training Day 2, September 11th, 2025 – recording](#)
- CAISO public [SIBR Bidding](#) webpage
  - [SIBR User Guide](#)

# Training Courses: Intertie Scheduling and Modeling

To find information on intertie scheduling and modeling, view the following resources:

- Instructor led training presentations and recordings:
  - [Presentation - EDAM Intertie Scheduling Readiness Training](#)
  - [Video - EDAM Intertie Scheduling Readiness Training](#)
  - [Presentation - Extended Day-Ahead Market \(EDAM\) Implementation - Intertie Scheduling Readiness Workshop - Jan 29, 2026](#)
  - [Video - Extended Day-Ahead Market EDAM Implementation - Intertie Scheduling Readiness and Q&A Session Workshop - Jan 30, 2026](#)
- Resources
  - [EDAM FAQ Guide](#), Intertie Scheduling and Modeling section

# Helpful Links

- [DAME Scenarios](#)
- [EDAM Scenarios](#)
- [Settlements Phase 1 Charge Codes](#)
- [Settlements Phase 2 Charge Codes](#)
- [Settlements DAME/EDAM Draft Config Outfile File](#)
- [Settlements BPM Walkthrough](#)
- [Access Charge Submission Template](#)
- [Access Charge Submission Procedure](#)
- [SIBR Rules](#)
- [Settlements Calendar](#)
- [Parallel Operations Plan](#)